

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
SHERMAN DIVISION**

R2 SOLUTIONS LLC  
*Plaintiff*

V.

DEEZER S.A.  
*Defendant*

CIVIL ACTION NO. 4:21-CV-90  
(Judge Mazzant)

R2 SOLUTIONS LLC  
*Plaintiff*

V.

WALMART INC.  
*Defendant*

CIVIL ACTION NO. 4:21-CV-91  
(Judge Mazzant)

R2 SOLUTIONS LLC  
*Plaintiff*

V.

CHARLES SCHWAB CORP.  
*Defendant*

CIVIL ACTION NO. 4:21-CV-122  
(Judge Mazzant)

R2 SOLUTIONS LLC  
*Plaintiff*

V.

JPMORGAN CHASE & CO.  
*Defendant*

CIVIL ACTION NO. 4:21-CV-174  
(Judge Mazzant)

## CLAIM CONSTRUCTION MEMORANDUM OPINION AND ORDER

Before the Court is Plaintiff R2 Solutions LLC's ("Plaintiff's" or "R2's") Opening Claim Construction Brief (Dkt. #36).<sup>1</sup> Also before the Court is the Joint Responsive Claim Construction Brief (Dkt. #42) filed by Defendants Deezer S.A. ("Deezer"), Walmart Inc. ("Walmart"), Charles Schwab Corp. ("Schwab"), and JPMorgan Chase & Co. ("JPMorgan") (collectively, "Defendants"), as well as Plaintiff's reply (Dkt. #43). Further before the Court are the parties' September 28, 2021 P.R. 4-3 Joint Claim Construction and Prehearing Statement (Dkt. #30) and the parties' December 6, 2021 Joint Claim Construction Chart Pursuant to P.R. 4-5(d) (Dkt. #44).

The Court held a claim construction hearing on December 16, 2021, to determine the proper construction of the disputed claim terms in United States Patents No. 7,370,011, 7,698,329, 8,190,610, 8,209,317, 8,341,157, and 9,928,279 (collectively, the "patents-in-suit").

The Court issues this Claim Construction Memorandum Opinion and Order and hereby incorporates-by-reference the claim construction hearing and transcript.

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<sup>1</sup> References to docket numbers are to Civil Action No. 4:21-CV-90, pursuant to the Court's consolidation of these claim construction proceedings for all of the above-captioned cases. (*See* Dkt. #34 (Joint Motion to Consolidate Claim Construction Briefing); Dkt. #35 (granting joint motion)).

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## BACKGROUND

Plaintiff alleges infringement of United States Patents No. 8,190,610 (Dkt. #36, Ex. A, the “’610 Patent”), 8,341,157 (*id.*, Ex. B, the “’157 Patent”), 7,698,329 (*id.*, Ex. C, the “’329 Patent”), 8,209,317 (*id.*, Ex. D, the “’317 Patent”), 9,928,279 (*id.*, Ex. E, the “’279 Patent”), and 7,370,011 (*id.*, Ex. F, the “’011 Patent”). The parties refer to these patents collectively as the “R2 Patents.”

The ’610 Patent, titled “MapReduce for Distributed Data Processing,” issued on May 29, 2021, and bears a filing date of October 5, 2006. Plaintiff submits that “[t]he ’610 Patent generally relates to the processing of large sets of data (often known today as ‘big data’).” (Dkt. #36, at p. 1). The Abstract of the ’610 Patent states:

An input data set is treated as a plurality of grouped sets of key/value pairs, which enhances the utility of the MapReduce programming methodology. By utilizing such a grouping, map processing can be carried out independently on two or more related but possibly heterogeneous datasets (e.g., related by being characterized by a common primary key). The intermediate results of the map processing (key/value pairs) for a particular key can be processed together in a single reduce function by applying a different iterator to intermediate values for each group. Different iterators can be arranged inside reduce functions in ways however desired.

The ’157 Patent, titled “System and Method for Intent-Driven Search Result Presentation,” issued on December 25, 2012, and bears a filing date of July 31, 2009. Plaintiff submits that “by ranking documents based on intent, rather than using ‘a traditional {query,document} score,’ the probability is greater that a relevant result will be in the final result set presented to the user.” (Dkt. #36, at p. 4) (citation omitted). The Abstract of the ’157 Patent states:

A system and method for intent driven search presentation. A query is received, over a network, from a user, wherein the query comprises at least one query token. The query is analyzed wherein at least one query keyword is identified in the query. The query is classified wherein the query is classified into at least one

intent using query keywords. A plurality of data objects that match query keywords is identified. The data objects are ranked, wherein at least one intent is assigned to at least some of the data objects. A result is built using the ranked plurality of data objects, wherein the result comprises display entries wherein if a data object has been assigned at least one intent, such intent is used to construct the display entry for the respective data object. The result is transmitted over the network to the user.

The '329 Patent, titled "Method for Improving Quality of Search Results by Avoiding Indexing Sections of Pages," issued on April 13, 2010, and bears a filing date of January 10, 2007. Plaintiff submits: "The inventions disclosed in the '329 patent are directed to a novel approach of ranking documents in response to a search query, which improves the relevance of search results and thwarts third party efforts to game search systems to improve query rankings." (Dkt. #36, at p. 7) (citation omitted). The Abstract of the '329 Patent states:

A method and apparatus for improving search results is provided. The method works by delineating sections of a document that are not relevant to the main content. The document content is subjected to ranking analysis in entirety. In response to a query results are recalled omitting terms included in the no-recall sections. Terms in the no-recall sections are not used in titles and abstracts of the results. The results are ordered at least in part by the rankings attributed to the identified no-recall sections.

The '317 Patent, titled "Method and Apparatus for Reconstructing a Search Query," issued on June 26, 2012, and bears an earliest priority date of August 10, 2006. Plaintiff submits that the claimed invention relates to reconstructing a full search query based on a partial query. (Dkt. #36, at pp. 9–10). The Abstract of the '317 Patent states:

Methods and systems for reconstructing a full query based on a partial query are disclosed. Existing interfaces for search engines may be rigid and require users to submit full queries to perform searched [*sic*, searches]. The methods and systems described herein may solve these problems by allowing a flexible way for users to submit a partial query and reconstruct a full query based on the partial query. A search may then be performed using the reconstructed query.

The '279 Patent, titled "Media Device and User Interface for Selecting Media," issued on March 27, 2018, and bears an earliest priority date of October 14, 2005. Plaintiff submits: "The

inventions disclosed in the '279 patent are directed to a novel user interface and method of ordering media files according to user preferences.” (Dkt. #36, at p. 11). The Abstract of the '279 Patent states:

A media device and user interface for selecting media. In one embodiment, the media is selected based upon a desired relationship measure between at least two media files. In another embodiment, the media is selected based upon a skip command control functions [*sic*].

The '011 Patent, titled “Financial Information Portal,” issued on May 6, 2008, and bears an earliest priority date of June 28, 2000. Plaintiff submits: “The inventions disclosed in the '011 patent are directed to a novel portal authentication system.” (Dkt. #36, at p. 13). The Abstract of the '011 Patent states:

In a system for a financial institution or other information maintainer, has a list of its account holders that also have accounts with a portal and have agreed to link their portal account and user account with the financial institution or other information maintainer. When a user logs onto the user's portal account, the portal server can request information from the user account over a trusted link to the financial institution or other information maintainer. The portal can request data for a particular user over the trusted link or can request bulk data for all users, using portal authentication data, as opposed to user authentication data. In the preferred embodiment, the actions allowed on a user account by the portal authentication data are more restrictive than the actions allowed by the user authentication data. As an example, a brokerage house might allow the portal to read recent transaction data for the user but not to make trades on the user's account, while the brokerage house would allow the user to perform many more actions if the user logged on directly to the brokerage house's system using the user's authentication data.

The parties submit the following chart summarizing which patents are asserted against which Defendant:

Case	'610 Patent	'157 Patent	'329 Patent	'317 Patent	'279 Patent	'011 Patent
<i>R2 Solutions LLC v. Deezer SA</i> , 4:21-cv-00090	X	X	X	X	X	
<i>R2 Solutions LLC v. Walmart Inc.</i> , 4:21-cv-00091	X	X	X			
<i>R2 Solutions LLC v. JPMorgan Chase &amp; Co.</i> , 4:21-cv-00174	X					X
<i>R2 Solutions LLC v. The Charles Schwab Corporation</i> , 4:21-cv-00122	X					X

(Dkt. #30, at p. 2).

### LEGAL STANDARDS

Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). The purpose of claim construction is to resolve the meanings and technical scope of claim terms. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). When the parties dispute the scope of a claim term, “it is the court’s duty to resolve it.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313–14; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification, and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language guides the Court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* at 1315 (quoting *Markman*, 52 F.3d at 979). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex*, 299 F.3d at 1325. For example, "[a] claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct.'" *Globetrotter Software, Inc. v. Elan Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics*, 90 F.3d at 1583). But, "[a]lthough the specification may aid

the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *accord Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent.”). The well-established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g*, 334 F.3d at 1324. However, the prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002). Statements will constitute disclaimer of scope only if they are “clear and unmistakable statements of disavowal.” *See Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1358 (Fed. Cir. 2003). An “ambiguous disavowal” will not suffice. *Schindler Elevator Corp. v. Otis Elevator Co.*, 593 F.3d 1275, 1285 (Fed. Cir. 2010) (citation omitted).

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the Court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

The Supreme Court of the United States has “read [35 U.S.C.] § 112, ¶ 2 to require that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). “A determination of claim indefiniteness is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (citations and internal quotation marks omitted), *abrogated on other grounds by Nautilus*, 134 S. Ct. 2120. “Indefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

## ANALYSIS

### *Agreed Claim Terms*

In their September 28, 2021 P.R. 4-3 Joint Claim Construction and Prehearing Statement, the parties submitted that they had not agreed on any constructions. (Dkt. #30, at p. 3).

*Defendants' Waiver Argument*

As a preliminary matter, Defendants argue that Plaintiff waived any arguments as to indefiniteness by not substantively addressing, in Plaintiff's opening brief, the assertions of indefiniteness raised by Defendants in the P.R. 4-3 Joint Claim Construction and Prehearing Statement (Dkt. #30). (See Dkt. #42, at pp. 13–14, 16, 17, 32 n.12, 49 & 69–72.) Plaintiff replies, for example, that “Defendants have been on notice since the filing of the Joint Claim Construction and Pre-hearing Statement,” which Plaintiff submits included “R2's claim construction positions and supporting intrinsic and extrinsic evidence.” (Dkt. #43, at p. 1).

The *Intellectual Ventures II* case cited by Defendants dealt with arguments regarding a motion for summary judgment regarding damages, not regarding indefiniteness. See *Intellectual Ventures II LLC v. Sprint Spectrum, L.P.*, No. 2:17-CV-662, 2019 WL 2959568, at \*3 (E.D. Tex. Apr. 18, 2019) (Payne, J.) (citing *Novosteel SA v. U.S. Bethlehem Steel Corp.*, 284 F.3d 1261, 1273 (Fed. Cir. 2002)), *adopted*, 2019 WL 1987204 (E.D. Tex. May 6, 2019) (Gilstrap, C.J.).

The *Saso* decision by the Federal Circuit, cited here by Defendants, is also unavailing. *Saso Golf, Inc. v. Nike, Inc.*, 843 F. App'x 291 (Fed. Cir. Feb. 10, 2021). There, “[w]hen the *Nautilus* decision issued between the final briefing on indefiniteness and the district court's final decision in this case, Saso turned down the opportunity to offer briefing on *Nautilus*, arguing that it was no different than the previous standard.” *Id.* at 297. The Federal Circuit explained that it “w[ould] not consider Saso's present argument that the district court erred by applying the previous standard when Saso only assigned importance to the difference in standards after an adverse outcome at the district court.” *Id.*

In the present case, Plaintiff opposes Defendants' assertions of indefiniteness and has merely forfeited the opportunity to have the first word, so to speak, on the indefiniteness

arguments that Defendants choose to continue to assert (as to which Defendants bear the burden, *see, e.g., Sonix*, 844 F.3d at 1377). Defendants do not persuasively justify precluding Plaintiff from presenting reply arguments as to these assertions of indefiniteness.

*Disputed Claim Terms in United States Patent No. 8,190,610*

**1. “a plurality of mapping functions that are each user-configurable”**

<b>“a plurality of mapping functions that are each user-configurable”</b> ('610 Patent, Claims 1, 17)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning.	“two or more mapping functions that are individually configurable by a user”

(Dkt. #36, at p. 18; Dkt. #42, at p. 2; Dkt. #43, at p. 2; Dkt. #44, Ex. A, at p. 1).

**a. The Parties’ Positions**

Plaintiff argues that “[t]he claims themselves provide definitive context as to the phrase’s meaning,” and “this plain and ordinary meaning is in accord with the ’610 patent’s specification.” (Dkt. #36, at p. 18). Plaintiff also argues that “Defendants’ construction is improper because [it] imports an extra limitation by requiring that each mapping function be ‘*individually* configurable by a user,’ as opposed to each of the mapping functions being ‘user-configurable,’ whether individually or not.” (*Id.*, at p. 19).

Defendants respond that “[a]lthough Plaintiff advocates for plain and ordinary meaning, its arguments demonstrate that the meaning it ascribes to this term would effectively read the word ‘each’ out of the claims. (Dkt. #42, at p. 2). “In addition,” Defendants argue, “other claim language provides context that demonstrates that the claims require that the mapping functions be individually configurable.” (*Id.*, at p. 3). Defendants also submit that “the ‘each user-

configurable’ language was added to the claims during prosecution to differentiate them from, and gain allowance over, prior art cited by the examiner.” (*Id.*). Finally, Defendants argue that “despite Plaintiff’s contrary assertion, the specification *does* describe the mapping functions in a way that demonstrates they are individually configurable.” (*Id.*, at p. 4).

Plaintiff replies that “a POSA would understand that mapping functions do not have to be individually configurable, but could be, for example, configured in bulk.” (Dkt. #43, at p. 2).

At the December 16, 2021 hearing, Defendants urged that configuring “in bulk” was prior art, and Defendants reiterated that the word “each” in this disputed term requires *individual* configurability. Defendants also proposed that the word “individually” in their proposed construction could be replaced by “independently.”

#### **b. Analysis**

Defendants do not persuasively justify their proposal that each function being user-configurable necessarily requires that each function must be *individually* configurable. That is, Defendants do not persuasively justify precluding multiple functions being configurable as a group.

Individual configuration of functions may be a desirable feature (*see* ’610 Patent at 3:48–52 & 4:39–50), but this is a specific feature of particular disclosed embodiments that should not be imported into the claims. *See Phillips*, 415 F.3d at 1323.

Defendants also cite prosecution history in which the examiner rejected claims based on the “Cruanes” reference (US 2006/0117036 A1). (*See* Dkt. #42, Ex. 1, Aug. 9, 2011 Office Action, at pp. 2–3). The patentee amended the claims to add the disputed language and argued:

Although the cited reference Cruanes appears to describe techniques for combining information from two sources, such as Employee and Department tables (See Abstract and Fig. 4), Cruanes does not appear to describe techniques or apparatus for providing partitioned data from different schema data groups to

*different mapping tasks that independently output a plurality of different lists of values* for each of a set of keys found in such map function's corresponding data partition to form corresponding different intermediate data for the different schema data group, in the manner claimed. Although Cruanes does describe partitioning the initial employee and department tables and sending partitions to different nodes, such nodes merely provide a joining function and *do not provide a plurality of mapping functions* that output lists for keys found in the data partition, in the manner claimed. Specifically, node 1 and 2 each performs a build phase to indicate hash buckets for a first table (dept). See Paragraph [0056]. A probe phase then operates to scan rows of partitions from a different table (emp) via the same nodes 1 and 2 using bitmap filtering and hash joining. See Paragraph [0057]. Cruanes describes bitmap filtering as using a bitmap filter to indicate whether buckets in the hash table have any entries for a hash join operation. See Paragraphs [0006]-[0010]. However, Cruanes fails to disclose mechanisms for "partitioning the data of each one of the data groups into a plurality of data partitions that each have a plurality of key-value pairs and providing each data partition to a selected one of a plurality of mapping functions that are each user-configurable to independently output a plurality of lists of values for each of a set of keys found in such map function's corresponding data partition to form corresponding intermediate data for that data group and identifiable to that data group" using different schemas, in the manner claimed.

(Dkt. #42, Ex. 2, Nov. 9, 2011 Amendment D, at pp. 16–17) (emphasis added).

Defendants do not identify any definitive statements in this prosecution history that would warrant requiring individual configurability of mapping functions. *Omega Eng'g*, 334 F.3d at 1324 ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive* statements made during prosecution.") (emphasis added). In particular, Defendants do not show how any of the patentee's statements purportedly relate to *configuration* of mapping functions, let alone that the patentee relied on any capability of *individually* configuring mapping functions. *See id.*

The Court therefore hereby construes "**a plurality of mapping functions that are each user-configurable**" to mean "**two or more mapping functions that are each configurable by a user.**"

**2. “the data of the first data group is mapped differently than the data of the second data group”**

<p align="center"><b>“the first data group is mapped differently than the data of the second data group”<sup>2</sup></b>          (’610 Patent, Claims 1, 17)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning.	“the mapping functions are different for the first data group and the second data group”

(Dkt. #36, at p. 19; Dkt. #42, at p. 5; Dkt. #43, at p. 3; Dkt. #44, Ex. A, at p. 1).

**a. The Parties’ Positions**

Plaintiff argues that “the limitation selected by Defendants for construction omits important claim language,” and “Defendants’ proposed language attempts to import extraneous limitations by requiring that ‘the mapping functions’ are different for the data groups, as opposed to the data of the data groups simply being ‘mapped differently’ ‘so that different lists of values are output for the corresponding different intermediate data,’ as recited by the plain language of the claims.” (Dkt. #36, at pp. 20–21).

Defendants respond that “Plaintiff argues that Defendants’ construction is improper because the claims require merely that the data of the data groups be ‘mapped differently,’ but Plaintiff fails to explain how that could be accomplished without different mapping functions for each data group.” (Dkt. #42, at p. 5). Defendants also submit that “Defendants’ construction is supported by the specification, which characterizes the ability to use different mapping functions for different data groups as an advantage of the purportedly ‘improved MapReduce’ that is the

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<sup>2</sup> As discussed herein, the parties express some disagreement regarding whether the proper term for construction is “the first data group is mapped differently than the data of the second data group” or should be “*the data of* the first data group is mapped differently than the data of the second data group.”

subject of the '610 Patent.” (*Id.*, at p. 6) (citation omitted). Finally, in response to Plaintiff’s argument that Defendants are omitting important claim language, “Defendants’ are agreeable to expanding both the construed phrase and Defendants’ proposed construction to include these three words [‘the data of’].” (*Id.*, at p. 7).

Plaintiff replies that “[h]ow data can be mapped differently in accordance with the claims is a question for expert discovery that will play a role in determining the extent of Defendants’ infringements.” (Dkt. #43, at p. 3). “Additionally,” Plaintiff argues that “Defendants’ construction is at odds with the specification, which specifically explains that ‘it is *likely* that map functions corresponding to each group are different’ and that ‘it is also *likely* that map functions corresponding to each group are the same.’ ’610 pat., 3:48–57 (emphasis added).” (*Id.*, at p. 4).

## **b. Analysis**

Claim 1 of the '610 Patent, for example, recites (emphasis added):

1. A method of processing data of a data set over a distributed system, wherein the data set comprises a plurality of data groups, the method comprising:

partitioning the data of each one of the data groups into a plurality of data partitions that each have a plurality of key-value pairs and providing each data partition to a selected one of a plurality of mapping functions that are each user-configurable to independently output a plurality of lists of values for each of a set of keys found in such map function’s corresponding data partition to form corresponding intermediate data for that data group and identifiable to that data group, wherein the data of a first data group has a different schema than the data of a second data group and *the data of the first data group is mapped differently than the data of the second data group* so that different lists of values are output for the corresponding different intermediate data, wherein the different schema and corresponding different intermediate data have a key in common; and

reducing the intermediate data for the data groups to at least one output data group, including processing the intermediate data for each data group in a manner that is defined to correspond to that data group, so as to result in a merging of the corresponding different intermediate data based on the key in common,

wherein the mapping and reducing operations are performed by a distributed system.

Defendants cite disclosure in the specification regarding “the improved MapReduce architecture”:

In the improved MapReduce architecture such as discussed with reference to FIG. 4, the input, intermediate and output data sets are partitioned into a set of data groups. With the partitioning into groups, it is *likely* that map functions corresponding to each group are different; data sets within the same group are characterized by the same schema; and data sets within different groups are characterized by different schemas it is also likely that map functions corresponding to each group are the same; data sets within all the groups are the same.

’610 Patent at 3:48–56 (emphasis added).

Even in this disclosure cited by Defendants, using different map functions for each group is merely “likely.” *Id.* On balance, use of different map functions for different groups is a specific feature of particular disclosed embodiments that should not be imported into the claims. *See id.* at 7:40–59; *see also Phillips*, 415 F.3d at 1323.

The Court therefore hereby expressly rejects Defendants’ proposed construction. No further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see also Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *Bayer Healthcare LLC v. Baxalta Inc.*, 989 F.3d 964, 977–79 (Fed. Cir. 2021).

The Court therefore hereby construes **“the data of the first data group is mapped differently than the data of the second data group”** to have its **plain meaning**.

### 3. “data set”

<p style="text-align: center;"><b>“data set”</b> (’610 Patent, Claims 1, 17)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	Indefinite

(Dkt. #36, at p. 21; Dkt. #42, at p. 12; Dkt. #43, at p. 4; Dkt. #44, Ex. A, at p. 5).

#### a. The Parties’ Positions

Plaintiff submits: “‘Data set’ only appears in the preamble of Claim 1. Plaintiff does not concede that the preamble of Claim 1 is limiting with respect to this disputed term. Nevertheless, the preamble of Claim 1 offers context that may be considered by a POSA in determining the plain and ordinary meaning.” (Dkt. #36, at p. 21 n.1).

Defendants respond that “Plaintiff offers no argument why the preamble should be non-limiting, and the antecedent basis rule is sufficient to render the preamble limiting.” (Dkt. #42, at p. 12 n.7). Defendants further argue that “[t]he term ‘data set’ is indefinite because it is deployed alongside ‘data group’ in an irreconcilably incoherent way.” (*Id.*, at p. 12). Specifically, Defendants argue that “the claims simultaneously provide that a data set is defined by *containing* data groups, while also being defined as being *contained by* data groups.” (*Id.*, at p. 14).

Plaintiff replies that “[t]he claims themselves clearly provide the context of ‘data set,’” and based on the specification “a POSA would understand that a ‘data set’ can include one or more ‘data groups,’ and a ‘data set’ can further be a part of a ‘data group.’” (Dkt. #43, at p. 5 & 6) (citing ’610 Patent at 3:48–56).

## b. Analysis

As a threshold matter, the parties dispute whether the recital of “data set” in the preamble of Claim 1 of the ’610 Patent is limiting.

In general, a preamble limits the invention if it recites essential structure or steps, or if it is “necessary to give life, meaning, and vitality” to the claim. *Pitney Bowes[, Inc. v. Hewlett-Packard Co.]*, 182 F.3d [1298,] 1305 [(Fed. Cir. 1999)]. Conversely, a preamble is not limiting “where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

*Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002).

There is a “presumption against reading a statement of purpose in the preamble as a claim limitation.” *Marrin v. Griffin*, 599 F.3d 1290, 1294–95 (Fed. Cir. 2010); *see Allen Eng’g Corp. v. Bartell Indus.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002) (“Generally, the preamble does not limit the claims.”); *see also Acceleration Bay, LLC v. Activision Blizzard Inc.*, 908 F.3d 765, 769–71 (Fed. Cir. 2018) (in a preamble reciting “[a] computer network for providing an information delivery service for a plurality of participants,” finding the phrase “information delivery service” to be non-limiting because it “merely describe[s] intended uses for what is otherwise a structurally complete invention”).

A preamble may be limiting, however, if it states a “fundamental characteristic of the claimed invention,” “serves to focus the reader on the invention that is being claimed,” or “states the framework of the invention.” *On Demand Mach. Corp. v. Ingram Indus., Inc.*, 442 F.3d 1331, 1343 (Fed. Cir. 2006). Also, a preamble may be limiting if it sets forth a feature “underscored as important by the specification.” *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1358 (Fed. Cir. 2012) (quoting *Catalina*, 289 F.3d at 808). Additionally, in some cases, “[w]hen a patent . . . describes the features of the ‘present invention’ as a whole, this description limits the

scope of the invention.” *Forest Labs., LLC v. Sigmapharm Labs., LLC*, 918 F.3d 928, 933 (Fed. Cir. 2019) (quoting *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1308 (Fed. Cir. 2007)).

Further, “[w]hen limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention.” *Eaton Corp. v. Rockwell Int’l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003); *see C.W. Zumbiel Co. v. Kappos*, 702 F.3d 1371, 1385 (Fed. Cir. 2012) (finding preambles limiting because “‘containers’ as recited in the claim body depend on ‘a plurality of containers’ in the preamble as an antecedent basis”).

Here, Claim 1 of the ’610 Patent recites (emphasis added):

1. A method of processing data of a *data set* over a distributed system, wherein *the data set comprises a plurality of data groups*, the method comprising:

partitioning the data of each one of *the data groups* into a plurality of data partitions that each have a plurality of key-value pairs and providing each data partition to a selected one of a plurality of mapping functions that are each user-configurable to independently output a plurality of lists of values for each of a set of keys found in such map function’s corresponding data partition to form corresponding intermediate data for that *data group* and identifiable to that *data group*, wherein the data of a first *data group* has a different schema than the data of a second *data group* and the data of the first *data group* is mapped differently than the data of the second *data group* so that different lists of values are output for the corresponding different intermediate data, wherein the different schema and corresponding different intermediate data have a key in common; and

reducing the intermediate data for the *data groups* to at least one output *data group*, including processing the intermediate data for each *data group* in a manner that is defined to correspond to that *data group*, so as to result in a merging of the corresponding different intermediate data based on the key in common,

wherein the mapping and reducing operations are performed by a distributed system.

The preamble provides antecedent basis for the recital of “the data groups” in the body of the claim, which the preamble recites are part of a “data set.” The antecedent basis provided by the preamble is thus intertwined with the “data set” that appears only in the preamble, and the

preamble is therefore limiting. *See Proveris Scientific Corp. v. Innovasystems, Inc.*, 739 F.3d 1367, 1373 (Fed. Cir. 2014) (“The phrase ‘the image data’ clearly derives antecedent basis from the ‘image data’ that is defined in greater detail in the preamble as being ‘representative of at least one sequential set of images of a spray plume.’”).

As for Defendants’ indefiniteness argument, independent Claim 1 of the ’610 Patent recites that a “data set comprises a plurality of data groups,” and independent Claim 33, by contrast, recites that a “data set belongs to a first data group.”<sup>3</sup> Defendants argue that this is an inconsistency in the usage of “data set” and “data group,” which Defendants argue renders the claims indefinite.

This argument based on distinctions between claims does *not*, however, demonstrate any inconsistency *within* any particular claim. Although courts usually presume that terms are used consistently throughout a patent, Defendants do not show that this is a rigid rule that precludes understanding that the patentee used “set” to comprise “groups” in one claim but used “group” to comprise “sets” in a different claim. Moreover, Defendants do not show that a set comprising groups necessarily precludes such groups from comprising sets.

At the December 16, 2021 hearing, the parties also addressed the following disclosure in the specification:

In the improved MapReduce architecture such as discussed with reference to FIG. 4, the input, intermediate and output *data sets are partitioned into a set of data groups*. With the partitioning into groups, it is likely that map functions corresponding to each group are different; *data sets within the same group* are characterized by the same schema; and *data sets within different groups* are characterized by different schemas it is also likely that map functions corresponding to each group are the same; *data sets within all the groups* are the same.

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<sup>3</sup> Independent Claim 40 likewise recites that a “first data set belongs to a first data group.”

'610 Patent at 3:48–57 (emphasis added). Defendants do not, however, demonstrate any inconsistency between partitioning a set into groups and such groups also having sets. That is, Defendants do not demonstrate any requirement of a strict hierarchy in this regard. The authorities cited by Defendants at the December 16, 2021 hearing do not compel otherwise. *See Icon Health & Fitness, Inc. v. Polar Electro Oy*, 656 F. App'x 1008, 1016 (Fed. Cir. Aug. 8, 2016) (discussing “ambiguous nature of the distinction between the two claim terms” there at issue); *see also TVnGO Ltd. v. LG Elecs. Inc.*, 861 F. App'x 453, 460 (Fed. Cir. June 28, 2021) (finding inconsistency between usage of term in independent claims and dependent claims).

On balance, Defendants do not meet their burden to show that the claim fails to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129; *see Sonix*, 844 F.3d at 1377. Defendants present no alternative proposed construction.

The Court therefore hereby construes “**data set**” to have its **plain meaning**.

#### 4. “data group”

<p style="text-align: center;"><b>“data group”</b> (’610 Patent, Claims 1, 2, 4, 17, 18)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“a group of data having the same schema and a mechanism for identifying data from that group (e.g., a group identifier)”

(Dkt. #36, at p. 21; Dkt. #42, at p. 7; Dkt. #43, at p. 7; Dkt. #44, Ex. A, at p. 3).

##### a. The Parties’ Positions

Plaintiff submits that “Plaintiff does not concede that the preamble of Claim 1 is limiting, but it offers context germane to a POSA’s understanding of the plain and ordinary meaning.”

(Dkt. #36, at p. 21 n.2.) Plaintiff also argues that “the claims of the ’610 patent define the term,” “Defendants’ construction improperly narrows the term to include additional limitations not required by the claims,” and “Defendants appear to be relying on a preferred embodiment from the specification.” (*Id.*, at pp. 21–22).

Defendants respond that “[d]ata group’ has a particular meaning within the context of the ’610 Patent that is repeatedly and consistently used.” (Dkt. #42, at p. 7).

Plaintiff replies that the disclosures relied upon by Defendants use the word “likely” and do not purport to limit the claimed inventions as a whole. (*See* Dkt. #43, at pp. 7–8).

### **b. Analysis**

As a threshold matter, the parties dispute whether the recital of “data group” in the preamble of Claim 1 of the ’610 Patent is limiting. The Court finds, as set forth in the discussion of the term “data set,” above, that the preamble of Claim 1 of the ’610 Patent is limiting.

As to whether the term “data group” requires construction, Defendants cite disclosure in the specification regarding “the improved MapReduce architecture”:

In the improved MapReduce architecture such as discussed with reference to FIG. 4, the input, intermediate and output data sets are partitioned into a set of data groups. With the partitioning into *groups*, it is *likely* that map functions corresponding to each group are different; *data sets within the same group are characterized by the same schema*; and data sets within different groups are characterized by *different schemas* it is also *likely* that map functions corresponding to each group are the same; data sets within all the groups are the same.

*In general*, partitioning the data sets into data groups enables a *mechanism to associate (group) identifiers with data sets*, map functions and iterators (useable within reduce functions to access intermediate data) and, also, to produce output data sets with (group) *identifiers*. It is noted that the output group *identifiers* may differ from the input/intermediate group *identifiers*.

'610 Patent at 3:48–64 (emphasis added); *see id.* at 3:65–4:18 (“each of the separate data groups is characterized by its own schema”; “an identification with the groups to which the original input data . . . belong”).

This disclosure regarding “schemas” pertains to specific features of particular disclosed embodiments that should not be imported into the claims, particularly in light of the usage of the word “likely.” *See Phillips*, 415 F.3d at 1323. Also of note, independent Claims 1 and 17 of the '610 Patent already recite “schema.”

Nonetheless, the word “group” inherently implies some mechanism to identify the group, and this understanding is consistent with what is described “[i]n general” in the above-reproduced disclosure regarding data groups and identifiers. '610 Patent at 3:58–64; *see also id.* at 1:66–2:2 & 4:45–50. Finding otherwise would potentially leave the scope of “data group” amorphous, and “some construction of the disputed claim language will assist the jury to understand the claims.” *TQP Dev., LLC v. Merrill Lynch & Co.*, No. 2:08-CV-471-WCB, 2012 WL 1940849, at \*2 (E.D. Tex. May 29, 2012) (Bryson, J., sitting by designation).

The Court therefore hereby construes **“data group”** to mean **“a group of data and a mechanism for identifying data from that group.”**

## 5. “data partition”

<b>“data partition”</b> ('610 Patent, Claims 1, 17)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“a portion of data from a data group that is the input to a map function”

(Dkt. #36, at p. 22; Dkt. #42, at p. 9; Dkt. #43, at p. 8; Dkt. #44, Ex. A, at p. 3).

### a. The Parties' Positions

Plaintiff argues that “[t]he plain and ordinary meaning of ‘data partition’ is readily ascertainable” and “Defendants’ construction . . . does not account for the context in which the disputed phrase appears (and is, in fact, inconsistent with the specification and claims).” (Dkt. #36, at p. 22).

Defendants respond that “although the claims themselves demonstrate that a ‘data partition’ is (1) a portion of data that is partitioned from a data group (as opposed to a portion of data partitioned from a data set or intermediate data), and (2) the input to a map function, construction is nonetheless required to avoid confusion with the other sorts of partitions described in the specification.” (Dkt. #42, at p. 9).

Plaintiff replies that “Defendants’ construction serves no purpose but their own, while simultaneously rendering essential claim language superfluous and confusing.” (Dkt. #43, at p. 8).

### b. Analysis

Claim 1 of the ’610 Patent, for example, recites (emphasis added):

1. A method of processing data of a data set over a distributed system, wherein the data set comprises a plurality of data groups, the method comprising:

*partitioning the data of each one of the data groups into a plurality of data partitions* that each have a plurality of key-value pairs and *providing each data partition to a selected one of a plurality of mapping functions* that are each user-configurable to independently output a plurality of lists of values for each of a set of keys found in such map function’s corresponding *data partition* to form corresponding intermediate data for that data group and identifiable to that data group, wherein the data of a first data group has a different schema than the data of a second data group and the data of the first data group is mapped differently than the data of the second data group so that different lists of values are output for the corresponding different intermediate data, wherein the different schema and corresponding different intermediate data have a key in common; and

reducing the intermediate data for the data groups to at least one output data group, including processing the intermediate data for each data group in a manner that is defined to correspond to that data group, so as to result in a

merging of the corresponding different intermediate data based on the key in common,

wherein the mapping and reducing operations are performed by a distributed system.

Defendants propose construing “data partition” to mean “a portion of data from a data group that is the input to a map function,” but surrounding claim language already expressly recites “partitioning the data of each one of the data groups into a plurality of data partitions” and “providing each data partition to a selected one of a plurality of mapping functions.”

Because Defendants’ proposed construction is therefore unnecessary and potentially confusing, the Court hereby expressly rejects Defendants’ proposed construction. No further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see also Finjan*, 626 F.3d at 1207 (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *Bayer*, 989 F.3d at 977–79.

The Court accordingly hereby construes **“data partition”** to have its **plain meaning**.

**6. “including processing the intermediate data for each data group in a manner that is defined to correspond to that data group, so as to result in a merging of the corresponding different intermediate data based on the key in common”**

<p><b>“including processing the intermediate data for each data group in a manner that is defined to correspond to that data group, so as to result in a merging of the corresponding different intermediate data based on the key in common”</b> (’610 Patent, Claim 1)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“processing the intermediate data differently based on which data group the intermediate data came from and merging the intermediate data regardless of what data group it came from based on the key in common”

(Dkt. #36, at p. 23; Dkt. #42, at p. 11; Dkt. #43, at p. 9; Dkt. #44, Ex. A, at p. 4).

#### **a. The Parties' Positions**

Plaintiff argues that “[t]he claims themselves show the meaning of the limitation” and “Defendants’ construction is inconsistent with the claim language and improperly narrows the phrase to a preferred embodiment.” (Dkt. #36, at p. 24).

Defendants respond that “[c]onstruction of this term is necessary to clarify the distinction between the purportedly ‘improved MapReduce architecture’ that is the subject of the claims and the conventional MapReduce architecture that is also described in the patent.” (Dkt. #42, at p. 11).

Plaintiff replies that “Defendants’ construction is inconsistent with the claim language and improperly narrows the phrase to a particular embodiment.” (Dkt. #43, at p. 9).

#### **b. Analysis**

Claim 1 of the ’610 Patent recites (emphasis added):

1. A method of processing data of a data set over a distributed system, wherein the data set comprises a plurality of data groups, the method comprising:

partitioning the data of each one of the data groups into a plurality of data partitions that each have a plurality of key-value pairs and providing each data partition to a selected one of a plurality of mapping functions that are each user-configurable to independently *output a plurality of lists of values for each of a set of keys* found in such map function’s corresponding data partition to *form corresponding intermediate data for that data group* and identifiable to that data group, wherein the data of a first data group has a different schema than the data of a second data group and the data of the first data group is mapped differently than the data of the second data group so that different lists of values are output for the corresponding different intermediate data, wherein the different schema and corresponding different intermediate data have a key in common; and

reducing the intermediate data for the data groups to at least one output data group, *including processing the intermediate data for each data group in a manner that is defined to correspond to that data group, so as to result in a merging of the corresponding different intermediate data based on the key in common,*

wherein the mapping and reducing operations are performed by a distributed system.

Defendants’ proposed construction is not consistent with the language of the disputed term, particularly when read in context of the other above-italicized portions of the claim, which refer to the data being different (not necessarily being “process[ed] . . . differently” as Defendants propose). The disclosures cited by Defendants do not compel otherwise. For example, these disclosures do not set forth any definition or disclaimer as to the terms here at issue, and Defendants identify no definitive statements that would warrant limiting the claimed invention as a whole. *See* ’610 Patent at 1:31–41 (“applying a different iterator to intermediate values for each group”); *see also id.* at 1:25–27, 3:48–61 & 4:56–57.

The Court therefore hereby expressly rejects Defendants’ proposed construction, and no further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see also Finjan*, 626 F.3d at 1207 (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *Bayer*, 989 F.3d at 977–79.

The Court therefore hereby construes **“including processing the intermediate data for each data group in a manner that is defined to correspond to that data group, so as to result in a merging of the corresponding different intermediate data based on the key in common”** to have its **plain meaning**.

**7. “the at least one output data group is a plurality of output data groups”**

<b>“the at least one output data group is a plurality of output data groups”</b> (’610 Patent, Claims 2, 18)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	Indefinite

(Dkt. #36, at p. 24; Dkt. #42, at p. 15; Dkt. #43, at p. 9; Dkt. #44, Ex. A, at p. 5).

**a. The Parties' Positions**

Plaintiff notes that “Defendants do not dispute Plaintiff’s proposed construction, but simply argue that this phrase is indefinite.” (Dkt. #36, at p. 24). Plaintiff submits that “the patents at issue are presumed valid under 35 U.S.C. § 282, and Defendants bear the burden of overcoming the presumption by clear and convincing evidence.” (*Id.*, at p. 50) (citation omitted).

Defendants argue that this term is internally inconsistent because “the claims purport to encompass where ‘one output data group’ is ‘two or more’ output data groups.” (Dkt. #42, at p. 15).

Plaintiff replies that “Defendant’s indefiniteness arguments launch into a misguided and convoluted diatribe that attempts to equate something as complex as a data group with a single number (‘1’) and a plurality of output data groups with another single number (‘2’),” and “[a] POSA would understand that a group of data can exist as a singular group of data while also comprising multiple groups of data.” (Dkt. #43, at pp. 9 & 10).

At the December 16, 2021 hearing, Plaintiff submitted that an output group of data could itself include multiple groups of data. Defendants responded that the patentee could have chosen to recite subgroups within output data groups but did not do so.

**b. Analysis**

Claims 2 and 18 of the ’610 Patent recite:

2. The method of claim 1, wherein:  
the at least one output data group is a plurality of output data groups.

\* \* \*

18. The computer system of claim 17, wherein:

the at least one output data group is a plurality of output data groups.

Defendants argue that these claims are internally inconsistent and are therefore indefinite. *See, e.g., Synchronoss Techs., Inc. v. Dropbox, Inc.*, 987 F.3d 1358, 1366–67 (Fed. Cir. 2021) (holding claims reciting “generating a [single] digital media file” that itself “compris[es] a directory of digital media files” indefinite, as the claims were nonsensical and required an impossibility).

But whereas the phrase “at least one output data group” encompasses having only one output data group, dependent Claims 2 and 18 simply narrow the claim scope by requiring the “at least one” to be a “plurality.” That is, whereas the independent claims allow for one or more output data groups, these dependent claims require two or more output data groups.

The Court therefore hereby expressly rejects Defendants’ indefiniteness argument, and Defendants present no alternative proposed construction.

The Court accordingly hereby construes **“the at least one output data group is a plurality of output data groups”** to have its **plain meaning**.

*Disputed Claim Terms in United States Patent No. 8,341,157*

#### 8. “intent(s)”

<p style="text-align: center;"><b>“intent(s)”</b> (’157 Patent, Claims 1, 2)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“goals that users pursue in a search query”	Indefinite

(Dkt. #36, at p. 25; Dkt. #42, at p. 17; Dkt. #43, at p. 10; Dkt. #44, Ex. A, at p. 6).

### a. The Parties' Positions

Plaintiff argues that “Plaintiff’s proposed construction comes verbatim from the specification,” and “each of the[] [disclosed] examples of an ‘intent’ reflects Plaintiff’s proposed construction.” (Dkt. #36, at pp. 25 & 26).

Defendants respond that “because the lexicography lacks objective boundaries, it is indefinite.” (Dkt. #42, at p. 18; *see id.*, at pp. 18–23). Defendants also argue that “[u]nder Plaintiff’s approach, a given search query may or may not be infringing, depending on the goal that is subjectively being pursued by a given user.” (*Id.*, at 23–24).

Plaintiff replies that “‘intents’ are specific programming on the system side (*see, e.g.*, ’157 pat., 4:43–54 and cols. 6–8 generally), and the specification, thus, ‘provides an objective baseline through which to interpret the claim[s]’ at issue. *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1378 (Fed. Cir. 2017).” (Dkt. #43, at p. 10). Plaintiff argues: “[T]he sentence upon which Defendants rely to argue that ‘intent’ is indefinite due to lexicography is found nine columns into the disclosure (halfway through the specification), and is used only in the context of the singular, non-limiting embodiment of FIG. 2.” (Dkt. #43, at p. 11) (footnote omitted). Plaintiff further argues: “The claims themselves make clear that the user’s mindset, or subjectivity, has nothing to do with the scope of the claims. To the contrary, a ‘computing device’ determines the ‘intent,’ not the user.” (*Id.*, at p. 13).

At the December 16, 2021 hearing, Plaintiff urged that this term is not subjective because this patent describes objective variables that are programmed into the system to represent likely desires based on objective information. Defendants responded that the variables identified by Plaintiff are keyed to the user’s mind, and the intent of the user is known only by the user.

**b. Analysis**

Claim 1 of the '157 Patent, for example, recites (emphasis added):

1. A method comprising the steps of:

receiving, over a network, a query from a user, the query comprising at least one query token;

analyzing the query, using at least one computing device, to identify at least one query keyword;

determining, at least the one computing device, a plurality of *intents* from the at least one keyword, each of the plurality of *intents* indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query;

classifying the query, using the at least one computing device, into at least one of the plurality of *intents*;

identifying, using the at least one computing device, a plurality of data objects available over the network that match the at least one query keyword;

assigning, using the at least one computing device, at least one of the plurality of *intents* to at least some of the plurality of data objects;

ranking, using the at least one computing device, the plurality of data objects;

building a result, using the at least one computing device, using the ranked plurality of data objects, the result comprises a plurality of display entries, at least one display entry customized to a respective assigned *intent* is constructed for each of the ranked plurality of data objects; and

transmitting the result, over the network, to the user.

The claim itself discusses the meaning of “intents” by reciting that “each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query.” The other independent claim here at issue, Claim 2, is the same in this regard.

The specification discloses:

An intent is a mapping from many combinations of keywords to a relatively small set of common goals that users pursue in a search query or session of multiple queries.

'157 Patent at 9:44–47. On balance, this does not rise to the level of a lexicography, particularly given that the above-discussed claim language already addresses this aspect of the recited

“intent.” *See* ’610 Patent, Cl. 1 (“each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query”).

As to Defendants’ indefiniteness argument, the “desire” itself is not a limitation of the claim. Rather, the “intents” are “indicat[ions]” of the likely desire of the user submitting the query. *Id.* This is therefore not a term like “quite small” or “relatively short messages” that might depend on subjective opinion. *See Innovative Display Techs. LLC v. Acer Inc.*, No. 2:13-CV-522-JRG, 2014 WL 4230037, at \*26 (E.D. Tex. Aug. 26, 2014) (Payne, J.); *see also Semcon IP Inc. v. Huawei Device*, No. 2:16-CV-437, 2017 WL 2972193, at \*25 (E.D. Tex. July 12, 2017) (Payne, J.).

Moreover, disclosures in the specification cited by Plaintiff reinforce that “intent” is readily understandable in the context of the claimed invention. *See* ’157 Patent at 4:16–5:19 (“the intent of a user in submitting a query can be inferred using a number of techniques”).

In light of this context provided by the claim itself as well as the specification, Defendants do not meet their burden to show that the claim fails to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129; *see Sonix*, 844 F.3d at 1377. The various authorities cited by Defendants, such as those emphasized by Defendants at the December 16, 2021 hearing, do not compel otherwise. *See Versata Software, Inc. v. Zoho Corp.*, 213 F. Supp. 3d 829, 836 (W.D. Tex. 2016); *see also IQASR LLC v. Wendt Corp.*, 825 F. App’x 900, 906 (Fed. Cir. Sept. 15, 2020) (“*non-limiting* examples do not on their own expressly define the bounds—the *limits*—of the claim”) (citation omitted).

Defendants present no alternative proposed construction. Because of this, and based on the context provided by other claim language and the specification as discussed above, the Court hereby construes “**intent(s)**” to have its **plain meaning**.

9. “determining, at least the one computing device, a plurality of intents from the at least one keyword, each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query”

<p><b>“determining, at least the one computing device, a plurality of intents from the at least one keyword, each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query”</b> (’157 Patent, Claim 1)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
<p>“determining, using at least the one computing device, a plurality of intents from the at least one keyword, each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query”<sup>4</sup></p>	<p>Indefinite</p>

(Dkt. #36, at p. 27; Dkt. #42, at p. 25; Dkt. #43, at p. 16; Dkt. #44, Ex. A, at pp. 6–7).

#### **a. The Parties’ Positions**

Plaintiff argues that its proposed construction corrects “minor typographical errors, and a POSA would naturally understand this to be apparent.” (Dkt. #36, at p. 27).

Defendants respond that Plaintiff does not meet the standard for judicial correction because the correction is subject to reasonable debate and is inconsistent with the prosecution history. (*See* Dkt. #42, at pp. 25–30).

Plaintiff replies that “[t]he disputed phrase is not indefinite, as it merely contains a minor typographical error that was not the fault of the patentee,” and “R2’s updated construction shown

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<sup>4</sup> Plaintiff previously proposed: “determining, using *the at least one* computing device, a plurality of intents from the at least one keyword, *wherein* each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query.” (*See* Dkt. #44, Ex. A, at pp. 6–7) (emphasis added). Defendants object to these changes to Plaintiff’s proposed construction. (*Id.*, at pp. 6–7 n.1). The Court hereby overrules Defendants’ objection.

in the table above is identical to the final amendment made by the patentee with respect to Claim 1 and allowed by the examiner . . . .” (Dkt. #43, at p. 16).

### **b. Analysis**

Claim 1 of the ’157 Patent, for example, recites (emphasis added):

1. A method comprising the steps of:

receiving, over a network, a query from a user, the query comprising at least one query token;

analyzing the query, using at least one computing device, to identify at least one query keyword;

*determining, at least the one computing device, a plurality of intents from the at least one keyword, each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query;*

classifying the query, using the at least one computing device, into at least one of the plurality of intents;

identifying, using the at least one computing device, a plurality of data objects available over the network that match the at least one query keyword;

assigning, using the at least one computing device, at least one of the plurality of intents to at least some of the plurality of data objects;

ranking, using the at least one computing device, the plurality of data objects;

building a result, using the at least one computing device, using the ranked plurality of data objects, the result comprises a plurality of display entries, at least one display entry customized to a respective assigned intent is constructed for each of the ranked plurality of data objects; and

transmitting the result, over the network, to the user.

On its face, the limitation of “determining, at least the one computing device, a plurality of intents . . .” appears to be an error.

Judicial correction of an error in a patent may be available “only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims.” *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003); *see LG Elecs., Inc. v. Quanta Computer Inc.*, 566 F. Supp. 2d 910, 913 (W.D. Wis. 2008) (noting the

“nearly impossible standard for judicial correction of a patent” and citing *Novo*, 350 F.3d 1348, which “refus[ed] to correct ‘a’ to ‘and’ because other possibilities for correction existed”).

In light of the context of multiple surrounding claim limitations reciting an action word followed by the phrase “using the at least one computing device,” the claim on its face suggests that the “determining” step should be “determining, using the at least one computing device, . . .,” and “the correction is not subject to reasonable debate based on consideration of the claim language and the specification.” *Novo*, 350 F.3d at 1357; see *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1358–61 (Fed. Cir. 2011) (construing “detect analyze” to mean “detect and analyze”); see also *Intermec Techs. Corp. v. Palm Inc.*, 811 F. Supp. 2d 973, 985 (D. Del. 2011) (deleting extraneous word).

As to the prosecution history, Defendants submit that “claim 1 and claim 2 were prosecuted in parallel and amended to recite consistent limitations,” which Defendants cite in support of Defendants’ argument that an alternative reasonable correction to Claim 1 would be to recite “by the at least one computing device” rather than “*using* the at least one computing device.” (See Dkt. #42, at pp. 27–28). On balance, this prosecution history and this distinction between Claim 1 and Claim 2 does not undercut finding that there is only one reasonable correction to Claim 1 based on the context provided by Claim 1 itself, as discussed above.

The prosecution history shows that the apparent error originated not with the patentee but rather with the United States Patent and Trademark Office upon issuing the ’157 Patent. Plaintiff cites evidence that at the time of allowance, the relevant portion of the claim here at issue had been amended by the patentee as follows (additions underlined and deletions in strikethrough or double square brackets, as in original):

1. (Currently Amended) A method comprising the steps of:

receiving, over a network, a query from a user, the query comprising at least one query token;

analyzing the query, using at least one computing device, to identify at least one query keyword;

determining, using at least the one computing device, at least one a plurality of intents from the at least one keyword, each of the at least one plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user[[’s]] ~~intent in~~ submitting the query; \* \* \* \*

The patentee thus amended the claim to recite “using at least the one computing device,” not “using the at least one computing device.” This is different from the correction previously proposed by Plaintiff, and Plaintiff in its reply brief proposes construing the disputed term in accordance with the above-reproduced language that the patentee used. At the December 16, 2021 hearing, Defendants urged that the change in Plaintiff’s proposal is further evidence that judicial correction is inappropriate and that the claim is indefinite.

The change to Plaintiff’s proposed construction perhaps affect Plaintiff’s credibility as to its arguments on this particular disputed term, but the indefiniteness analysis focuses on the claim language, not the proposed constructions.

Nonetheless, because the applicable claim language in the prosecution history differs from the above-discussed correction that is suggested by the other claim language as discussed above, and because correcting the claim so as to match the claim language in the prosecution history would *not* be clear on the *face* of the patent as required by *Novo*, the error is *not* judicially correctable. *See Novo*, 350 F.3d at 1357. This is true regardless of whether the error may have occurred without any fault of the patentee (assuming, without deciding or addressing, that the patentee had no duty to verify that the language of the issued claims matched the claim language as it stood at the time of allowance and, if in error, to seek a certificate of correction). *See Grp. One, Ltd. v. Hallmark Cards, Inc.*, 407 F.3d 1297, 1303 (Fed. Cir. 2005) (“the district court can correct an error only if the error is evident from the face of the patent”). The *Hoffer* case cited

by Plaintiff during the December 16, 2021 hearing does not compel otherwise. *See Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1331 (Fed. Cir. 2005) (regarding an error in claim dependency, finding that “the error was apparent from the face of the patent,” “a patent should not be invalidated based on an obvious administrative error,” and “[t]he defendants did not state that they were prejudiced, or even confused, by the error”).

But this is not the end of the claim construction inquiry. That is, the unavailability of judicial correction does not foreclose claim construction as to this disputed term. In the above-cited *Group One* case, “the district court found the missing language essential to the validity of [the] claim . . . .” 407 F.3d at 1303. Here, by contrast, the above-discussed claim language itself supports interpreting the disputed term as referring to using the at least one computing device.

The authorities cited by Defendants, such as those discussed by Defendants during the December 16, 2021 hearing, do not compel otherwise. *See Uniloc USA, Inc. v. Samsung Elecs. Am., Inc.*, No. 2:18-CV-0041, 2019 WL 1614724 (E.D. Tex. Apr. 15, 2019) (Payne, J.); *see also Smith v. ORBCOMM, Inc.*, No. 2:14-CV-666, 2015 WL 5302815, at \*13 (E.D. Tex. Sept. 10, 2015) (Gilstrap, J.) (finding judicial correction unavailable because correction was subject to reasonable debate).

Finally, as to Plaintiff’s prior proposal of introducing the word “wherein,” this could not have been fairly characterized as *correcting* the claim because no error in this aspect is apparent on the face of the claim. Nonetheless, including “wherein” is appropriate as part of *construing* the term here at issue, so as to assist the finder of fact in understanding the scope of the claim. The amendments during prosecution striking various instances of “wherein,” cited by Defendants, do not compel otherwise. (*See* Dkt. #42, at p. 29).

Based on the foregoing, Defendants do not meet their burden to show that the claim fails to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129; *see Sonix*, 844 F.3d at 1377. Defendants present no alternative proposed construction.

The Court therefore hereby construes **“determining, at least the one computing device, a plurality of intents from the at least one keyword, each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query”** to mean **“determining, using the at least one computing device, a plurality of intents from the at least one keyword, wherein each of the plurality of intents indicates a type of information regarding the query keyword that is likely to be desired by a user submitting the query.”**

**10. “wherein the at least one intent comprises an unclassified intent”**

<b>“wherein the at least one intent comprises an unclassified intent”</b> (‘157 Patent, Claim 3)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“wherein the at least one intent is not mapped from one or more keywords to a goal the user pursues in a search query”	“wherein the at least one intent comprises an intent for which no defined intents match the query”

(Dkt. #36, at p. 28; Dkt. #42, at p. 30).

Plaintiff submits in its reply brief: “R2 is no longer pursuing Claim 3 of the ‘157 patent. Thus, construction of the phrase, ‘wherein the at least one intent comprises an unclassified intent,’ is no longer necessary.” (Dkt. #43, at p. 10 n.3). The court therefore does not further address this term.

**11. “the query is classified by linguistic analysis of the at least one query keyword”**

<b>“the query is classified by linguistic analysis of the at least one query keyword”</b> (’157 Patent, Claim 5)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	Indefinite

(Dkt. #36, at p. 29; Dkt. #42, at p. 32; Dkt. #43, at p. 17; Dkt. #44, Ex. A, at p. 8).

**a. The Parties’ Positions**

Plaintiff argues that this term is not indefinite. (Dkt. #36, at p. 29). Plaintiff submits that “the patents at issue are presumed valid under 35 U.S.C. § 282, and Defendants bear the burden of overcoming the presumption by clear and convincing evidence.” (*Id.*, at p. 50) (citation omitted).

Defendants respond that “there is uncontroverted evidence that linguistic analysis was performed ‘in more than one way’ in the relevant art, with varying differences that would affect infringement, and without guidance from the specification for discerning which of the various methods appropriate [*sic*].” (Dkt. #42, at p. 32) (footnote omitted) (citation omitted).

Plaintiff replies that “[t]he plain and ordinary meaning of the term communicates its exact meaning, e.g., analysis of language, and/or the ‘scientific analysis of a language sample.’” (Dkt. #43, at p. 17) (citation omitted).

**b. Analysis**

Claim 5 of the ’157 Patent depends from Claim 1, and Claim 5 recites:

5. The method of claim 1 wherein, in the classifying step, the query is classified by *linguistic analysis* of the at least one query keyword.

Defendants’ do not demonstrate that the phrase “linguistic analysis” gives rise to any lack of reasonable certainty in this context. Defendants submit general extrinsic evidence that the phrase “linguistic analysis” has been used in various ways (*see* Dkt. #42, Exs. 5–13), but “[b]readth is not indefiniteness.” *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1583 (Fed. Cir. 1996) (quoting *In re Gardner*, 427 F.2d 786, 788 (C.C.P.A. 1970)). Also, Defendants’ argument appears to be more akin to a challenge as to the adequacy of written description or enablement, which are not at issue in these claim construction proceedings. *See Phillips*, 415 F.3d at 1327 (“we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction”) (citation omitted).

Defendants do not meet their burden to show that the claim fails to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129; *see Sonix*, 844 F.3d at 1377. Defendants present no alternative proposed construction.

The Court therefore hereby construes **“the query is classified by linguistic analysis of the at least one query keyword”** to have its **plain meaning**.

*Disputed Claim Terms in United States Patent No. 7,698,329*

**12. “said data includes an abstract describing each document of said plurality of documents”**

<b>“said data includes an abstract describing each document of said plurality of documents” (’329 Patent, Claims 4, 11)</b>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“abstract” is “a short paragraph providing a concise description for a recalled document”

(Dkt. #36, at p. 29; Dkt. #42, at p. 36; Dkt. #43, at p. 18; Dkt. #44, Ex. A, at p. 8).

### **a. The Parties' Positions**

Plaintiff argues that Defendants' proposal "improperly, and unnecessarily, attempts to limit 'abstract' to a particular embodiment by requiring that the term be a 'short paragraph.'" (Dkt. #36, at p. 30).

Defendants respond that, in the specification, the patentee "equate[d] 'short descriptive paragraphs' with 'abstract,'" and "[t]o the extent Plaintiff contends that a single term or attribute of a document falls within the scope of the claimed 'abstract,'—such as a title, for example—that flatly contradicts the specification." (Dkt. #42, at pp. 37 & 38).

Plaintiff replies that "Defendants combine two sentences [in the specification] that include the disputed term to arrive at their construction, which is neither clearly stated nor expressly defined." (Dkt. #43, at p. 18).

### **b. Analysis**

The specification discloses:

Search results returned by a search engine for a query contain *short descriptive paragraphs or abstracts* for a recalled document. Abstracts provide a concise description of the respective document. According to an embodiment, the contents of no-recall sections are excluded from the abstract. This meets the expectations of users in that if a term is not used to recall a document, the term should not show up in an abstract.

'329 Patent at 4:54–60 (emphasis added).

In some cases, the word "or" can indicate interchangeable use, and "interchangeable use of . . . two terms is akin to a definition equating the two." *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1326 (Fed. Cir. 2009).

In the present case, however, Defendants' argument is undercut by the second above-reproduced sentence, which elaborates on the word "abstracts" without referring to "paragraphs." The *Pactec* case cited by Defendants, to whatever extent it is analogous, is not binding on this

Court and is unpersuasive in the circumstances of the present case. *See Pactec, Inc. v. I.C.E. Packaging Co., LLC*, No. 1:18-CV-118, 2021 WL 5277131, at \*12–\*13 (E.D. Tenn. Nov. 12, 2021).

Indeed, the above-reproduced disclosure of “short descriptive paragraphs or abstracts” could just as well be read as *distinguishing* between these two concepts rather than equating them. That is, the usage of the phrase “short descriptive paragraphs” in the same sentence as the word “abstracts” could be read as evidence that they have *different* meanings.

The Court hereby expressly rejects Defendants’ proposed construction. No further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see also Finjan*, 626 F.3d at 1207 (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *Bayer*, 989 F.3d at 977–79.

The Court accordingly hereby construes “**said data includes an abstract describing each document of said plurality of documents**” to have its **plain meaning**.

13. “each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall” and “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents”

<p>“each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall”</p> <p>“wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents”</p> <p>( ’329 Patent, Claims 1, 8)</p>	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	<p>“recall” is “generating results for a search engine query”</p> <p>“not used” is “ignored”</p> <p>“section” is “defined portion within the structure of a document”</p>

(Dkt. #36, at p. 31; Dkt. #42, at pp. 39, 42 & 44; Dkt. #43, at pp. 19–21; Dkt. #44, Ex. A, at pp. 9 & 10).

#### a. The Parties’ Positions

Plaintiff argues that “Defendants’ proposed construction should be rejected because it is inconsistent with the claim language and improperly narrows the disputed phrase using a morass of alternate phraseology.” (Dkt. #36, at pp. 31–32; *see id.*, at pp. 32–33).

As to “recall,” Defendants respond that “the specification provides an explicit definition of ‘document recall,’” and “Defendants’ construction is also supported by ample intrinsic evidence from the specification and the claims themselves.” (Dkt. #42, at p. 39) (citations omitted). Defendants also urge that “the dichotomy between ‘recall’ and ‘no-recall’ sections of a

document is central to the process of ranking ‘recalled’ documents, as described and claimed in the ’329 Patent. Without this distinction, the claims collapse into the known prior art . . . .” (*Id.*, at p. 40) (citation omitted).

As to “not used,” Defendants argue that “[t]he word ‘ignored’ appears throughout the specification interchangeably with ‘not used’ . . . .” (*Id.*, at p. 42). Further, Defendants argue that “Defendants’ proposed construction also resolves a potential ambiguity in the claims by clarifying that ‘not used’ is more than a simple omission from consideration by the search engine.” (*Id.*, at p. 43) (footnote omitted).

As to “section(s),” Defendants respond that “[t]he identification of sections within the overall structure of a document is a critical aspect of the ’329 Patent’s claimed invention,” and “Defendants’ construction is entirely consistent with the specification and the purpose of the claimed invention.” (*Id.*, at p. 44; *see id.* at pp. 45–46).

Plaintiff replies that Defendants improperly equate “recall” and “document recall,” and Plaintiff argues that “[t]he patentee clearly intended to use only the unmodified term ‘recall’ in the claim . . . .” (Dkt. #43, at p. 19). As to “not used,” Plaintiff submits that “the no-recall sections that are ‘not used’ for recalling are still used by being ‘input to forms of analysis of the document that affect, for example, the document’s ranking.’” (*Id.*, at p. 20) (discussing ’329 Patent at 3:17–22). As to “section(s),” Plaintiff replies that “not a single excerpt [cited by Defendants] uses the word ‘defined’ or ‘portion,’” and “[i]t is improper to limit the meaning of ordinary and well-known terms by preferred embodiments and/or without disavowal or lexicography.” (Dkt. #43, at p. 21).

**b. Analysis**

**(i) “recall”**

The specification discloses:

The search result generated by a search engine comprises a list of documents and may contain summary information about the document. The list of documents may be ordered. To order a list of documents, a search engine may assign a rank to each document in the list. When the list is sorted by rank, a document with a relatively higher rank may be placed closer to the head of the list than a document with a relatively lower rank. A search engine may rank the documents according to relevance to the search query. Relevance is a measure of how closely the subject matter of a document matches a search query’s terms. The inclusion of a document within the search engine results generated by a search engine for a search engine query is *referred to herein as document recall*.

’329 Patent at 1:60–2:5 (emphasis added). The specification also discloses:

The terms inside no-recall sections do not contribute to the document term frequency counts and are *not used for recalling the documents in response to search engine queries*. However the no-recall sections are included as input to forms of analysis of the document that affect, for example, the document’s ranking.

*Id.* at 3:17–20 (emphasis added).

Because these disclosures, as well as the claims themselves, demonstrate that the word “recall” is being used here as a technical term of art rather than according to its meaning in common parlance, “some construction of the disputed claim language will assist the jury to understand the claims.” *TQP Dev., LLC v. Merrill Lynch & Co.*, No. 2:08-CV-471-WCB, 2012 WL 1940849, at \*2 (E.D. Tex. May 29, 2012) (Bryson, J., sitting by designation).

Defendants’ proposal of “generating results for a search engine query” is appropriate in light of the above-reproduced disclosures and the context in which the word “recall” is used throughout the ’329 Patent.

**(ii) “not used”**

The specification discloses:

In examining the various sections, the crawler identifies sections to *ignore*, that is, to *not* index in search engine indexes and or otherwise *use* for recalling the document. Such sections are referred to herein as “no-recall sections.” Those portions that are indexed for recalling are referred to as recall sections. In an embodiment, a crawler ignores no-recall sections demarcated by, for example, a tag. In another embodiment a no-recall section may be identified by analyzing section content rather than examining only delimiters.

’329 Patent at 3:9–15 (emphasis added).

This disclosure perhaps demonstrates that to “ignore” means to not use (at least for certain purposes), but this does not adequately support Defendants’ proposal that “not used” requires being “ignored.” At the December 16, 2021 hearing, Defendants confirmed that their proposal of “ignored” would require an affirmative act (not merely the fact of not being used). The Court hereby expressly rejects Defendants’ argument that the term “not used” requires an affirmative act. Also, this disclosure goes on to state that “the no-recall sections” may be used for other purposes, such as for “input to forms of analysis of the document that affect, for example, the document’s ranking.” *Id.* at 3:17–22.

(iii) “section”

The specification discloses, for example:

The layout and basic structure of a web page presented in FIG. 1 could have an HTML code implementation structure as illustrated in FIG. 2. The HTML code of Web page 100 can be statically or dynamically generated. The <HTMLD tags, lines 200 and 235 specify the version of HTML used in the document. The <BODY> tags lines 204 and 234 enclose the document’s content. The positioning of elements in the Web page is achieved by nested tables; lines 205, 233 and 211,225. Information in tables is presented in rows <TR> and table data elements <TD>.

A <div class=“robots-noindex”> tag is used to *delimit the no-recall sections of web page 101*. The tag delimits the copyright notice 104 lines 229, 231, navigation pane *section 102* lines 213,215, related blogs 105 and ad *section 106* lines 221, 223. Functionally, the <div class=“robots-noindex”> tag causes content contained therein to be ignored for purposes of recalling the document. For example, if inside the ad *section 106* there is a term “shoes”, and the term “shoes” does not appear anywhere else in the page, the page will not be recalled

for a search engine query for the word “shoes”. Of course, if the word “shoes” is included in other portions of the page, the page will be recalled for the query. The <div class=“robots noindex” tag as introduced works at a granular level, with the ability to create no-recall *sections of a document*. It should be noted that the actual name of the tag <div class=“robots noindex” is for illustration; any tag name can aptly serve the same purpose.

’329 Patent at 3:41–67 (emphasis added).

FIG. 3 is a flow diagram of a procedure for determining whether a *section of a document* is a no-recall section according to an embodiment of the present invention. Referring to FIG. 3, at step 301, the HTML code of a document is parsed to determine various logical sections in step 302.

*Id.* at 4:17–21 (emphasis added).

In light of these disclosures, as well as the context in which these disputed terms appear in the claims, Defendants’ proposed construction appropriately requires that a “section” is not merely an arbitrary portion of a document but rather is defined in some recognizable manner within the document.

#### (iv) Construction

Based on all of the foregoing, the Court hereby construes “**each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall**” and “**wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents**” to have their **plain meaning** except that the Court hereby construes “**recall**” to mean “**generating results for a search engine query**” and hereby construes “**section**” to mean “**defined portion within the structure of a document.**”

**14. “for each respective abstract of each document of said certain documents, said abstract excludes terms from the respective at least one section not used by said search engine to recall said each document”**

<p><b>“for each respective abstract of each document of said certain documents, said abstract excludes terms from the respective at least one section not used by said search engine to recall said each document”</b>          (’329 Patent, Claims 4, 11)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	<p>“recall” is “generating results for a search engine query”</p> <p>“not used” is “ignored”</p> <p>“section” is “defined portion within the structure of a document”</p>

(Dkt. #36, at p. 33; Dkt. #42, at pp. 39, 42 & 44; Dkt. #43, at pp. 19–21; Dkt. #44, Ex. A, at p. 9 & 10).

**a. The Parties’ Positions**

Plaintiff submits that “Defendants propose construing this phrase by construing two of its subcomponents, each of which are discussed above.” (Dkt. #36, at p. 33).

Defendants respond as to this term together with the other terms that recite “recall,” “not used,” and “section,” namely “each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall” and “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents,” which are discussed above. (*See* Dkt. #42, at pp. 39–46).

**b. Analysis**

For the same reasons discussed above as to the terms “each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall” and “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents,” the Court hereby construes **“for each respective abstract of each document of said certain documents, said abstract excludes terms from the respective at least one section not used by said search engine to recall said each document”** to have its **plain meaning** except that the Court hereby construes **“recall”** to mean **“generating results for a search engine query”** and hereby construes **“section”** to mean **“defined portion within the structure of a document.”**

**15. “document(s)”**

<p style="text-align: center;"><b>“document(s)”</b> (’329 Patent, Claims 1, 4, 5, 8, 11, 12)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
<p>“any unit of information that may be indexed by search engine indexes”</p>	<p>No construction necessary. To the extent a construction is necessary, the construction should include the full description:</p> <p>“A document is any unit of information that may be indexed by search engine indexes, which are described below. Often a document is a file which may contain plain or formatted text, inline graphics, and other multimedia data, and hyperlinks to other documents. A document may conform to XML (Extensible Mark-up Language, as promulgated by the WorldWideWeb Consortium), HTML (Hypertext Markup Language), or other public or private standard (e.g. PDF, Portable Document Format by Adobe™, MS Word by Microsoft™). Documents may be static or dynamically generated.”</p>

(Dkt. #36, at p. 34; Dkt. #42, at p. 46; Dkt. #43, at pp. 21–22; Dkt. #44, Ex. A, at pp. 11–12) (formatting modified).

**a. The Parties’ Positions**

Plaintiff argues that whereas the specification sets forth a definition for this term, “Defendants’ proposed construction shovels a paragraph’s-worth of information into a proposed construction for a single word.” (Dkt. #36, at p. 34). Plaintiff urges that the Court should adopt the patentee’s lexicography. (*See id.*).

Defendants respond that “a POSA would understand the context of the claimed ‘document’ through its preferred embodiment—a webpage—and its only other disclosed embodiment, a file formatted in a standard format such Adobe PDF and Microsoft Word.” (Dkt.

#42, at p. 46) (citations omitted). Defendants argue that “Plaintiff’s proposed construction should be rejected because it injects ambiguity and risks jury confusion as a result of its partial omission of the full definition of ‘document’ given by the patentee.” (*Id.*, at p. 47).

Plaintiff replies: “As Defendants agree, the term ‘document’ is explicitly defined in the specification. *See* R[esponse] Br. at 46; ’329 pat., 1:34–36. Including in the definition what a document ‘often’ is, ‘may conform to,’ or ‘may be’ is clearly impermissibly limiting.” (Dkt. #43, at p. 22).

### **b. Analysis**

The specification discloses:

The information resources searched by search engines are *referred to herein as documents*. A document is any unit of information that may be indexed by search engine indexes, which are described below. *Often* a document is a file which may contain plain or formatted text, inline graphics, and other multimedia data, and hyperlinks to other documents. A document may conform to XML (Extensible Mark-up Language, as promulgated by the WorldWideWeb Consortium), HTML (Hypertext Markup Language), or other public or private standard (e.g. PDF, Portable Document Format by Adobe™, MS Word by Microsoft™). Documents may be static or dynamically generated.

’329 Patent at 1:33–44 (emphasis added).

This amounts to an explicit definition of the term “document” in the ’329 Patent, and “the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citation omitted).

Defendants propose additional language from this above-reproduced disclosure about what “often” a document may contain. Particularly in light of this usage of the permissive word “often,” this additional language is not part of the patentee’s lexicography and therefore should not be included in the Court’s construction. *See, e.g., CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002).

The Court therefore hereby construes “**document**” to mean “**any unit of information that may be indexed by search engine indexes.**”

*Disputed Claim Terms in United States Patent No. 8,209,317*

# **16. “partial query”**

<p style="text-align: center;"><b>“partial query”</b> (’317 Patent, Claims 1, 2, 8, 12)</p>	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning <sup>5</sup>	“a shorthand way of expressing a typical search query”

(Dkt. #36, at p. 35; Dkt. #42, at p. 47; Dkt. #43, at p. 22; Dkt. #44, Ex. A, at p. 12).

## **a. The Parties’ Positions**

Plaintiff argues that whereas the specification sets forth a definition for this term, Defendants’ proposal relies on additional disclosure that is not part of the definition. (Dkt. #36, at p. 35). Plaintiff urges that the Court should adopt the patentee’s lexicography. (*See id.*).

Defendants respond that “Plaintiff offers a definition for ‘partial query’ that is already recited in a ‘wherein clause’ in the same claims,” and Defendants conclude that “it is preferable for the Court to define a ‘partial query’ as being ‘shorthand’ and to separately construe the language in Plaintiff’s proposed construction, which is recited elsewhere in the claim.” (Dkt. #42, at pp. 47 & 49; *see id.*, at pp. 47–49).

Plaintiff replies: “Upon further reflection, R2 proposes that ‘partial query’ should be simply accorded its plain and ordinary meaning.” (Dkt. #43, at p. 22). Plaintiff argues that

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<sup>5</sup> Plaintiff previously proposed: “any abbreviated or incomplete search query such that the submitted query is not fully representative of the entire search query desired by the user.” (*See* Dkt. #44, Ex. A, at pp. 12–13). Defendants object to these changes to Plaintiff’s proposed construction. (*Id.*, at p. 12 n.2). The Court hereby overrules Defendants’ objection.

“[b]ecause the claims themselves include the lexicographic definition of ‘partial query,’ there is no need for further construction.” (*Id.*). Plaintiff also argues that Defendants’ proposed construction is based on subsequent disclosure that “does not provide a definition for ‘partial query,’ but simply provides additional context for the actual definition.” (*Id.*, at pp. 22–23).

## **b. Analysis**

Claim 1 of the ’317 Patent, for example, recites (emphasis added):

1. A computer database system for providing search results to a user in response to user submissions over a data network, the computer database system comprising:

a database configured to store information about events in the computer database system; and

a query reconstruction server in data communication with the database and operative to receive a *partial query* submitted at a remote user client system by a user seeking search results matching the submitted *partial query* and, in response to the received *partial query*, determine a full query based on

(i) the received *partial query*, and

(ii) information stored in the database about queries previously-submitted by users,

wherein the submitted *partial query* comprises an abbreviated or incomplete search query which is not fully representative of an entire search query desired by the user and the full query is better representative of the entire search query desired by the user.

The claim itself thus expressly recites that a “partial query comprises an abbreviated or incomplete search query which is not fully representative of an entire search query desired by the user.” The other independent claim here at issue, Claim 8, is the same in this regard.

The specification likewise discloses:

FIG. 2 is a flow chart of an exemplary method for providing search results to a user based on a partial query. Initially, the user may submit a partial query which is received at 210. *As used herein*, the term “partial search query” or “*partial query*” means any abbreviated or incomplete search query such that the submitted query is not fully representative of the entire search query desired by the user. *In other words*, partial search queries are shorthand ways of expressing typical search queries. For example, a partial query “a i” may be used to represent the full search queries “American Idol™” or “auto insurance.” It should be apparent that a full search query may be represented by a multitude of partial search

queries. As an additional example, the full query “auto insurance” may be represented by the partial queries “a ins,” “auto ins,” “a insurance” and the like. The partial search query may include a regular expression, such as the partial query “w c s[oc].\*”, which may match the full queries “world cup soccer”, “world cup schedule”, “world cup scores”, and the like.

’317 Patent at 3:9–26 (emphasis added).

This “[a]s used herein” sentence sets forth a definition of “partial query” and is consistent with the claim language set forth above. *See, e.g., Phillips*, 415 F.3d at 1316 (“the inventor’s lexicography governs”) (citation omitted); *Sinorgchem Co., v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007) (noting that term being “set off by quotation marks” is “often a strong indication that what follows is a definition”). The subsequent “[i]n other words” sentence relied upon by Defendants is less explicit and less consistent with the claim language set forth above and should not be deemed to be part of the lexicography. *See, e.g., CCS Fitness*, 288 F.3d at 1366.

The Court therefore hereby construes **“partial query”** to mean **“an abbreviated or incomplete search query such that the submitted query is not fully representative of the entire search query desired by the user.”**

**17. “query reconstruction server . . . operative to receive a partial query submitted at a remote user client system . . . and . . . determine a full query . . .”**

<b>“query reconstruction server . . . operative to receive a partial query submitted at a remote user client system . . . and . . . determine a full query . . .”</b> (’317 Patent, Claims 1, 2)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	112(f) / Indefinite

(Dkt. #36, at p. 36; Dkt. #42, at p. 51; Dkt. #43, at p. 23; Dkt. #44, Ex. A, at p. 14).

**a. The Parties' Positions**

Plaintiff argues that Defendants cannot overcome the presumption against means-plus-function treatment for this non-means term, and Plaintiff submits that the word “server” connotes structure. (Dkt. #36, at p. 36; *see id.*, at p. 37–39).

Defendants respond that the constituent phrase “query reconstruction server” is a “nonce” term devoid of structural meaning, and Defendants argue that this disputed term “is a means-plus-function limitation subject to 35 U.S.C. §112(6) without sufficient corresponding structure disclosed in the ’317 patent specification.” (Dkt. #42, at p. 52; *see id.*, at pp. 52–53).

Plaintiff replies that the presumption against means-plus-function treatment has not been rebutted because “a POSA would understand that ‘query reconstruction server’ denotes sufficiently definite structure and that the claims fully support ‘query reconstruction server’ as definite structure by explicitly describing how the server operates within the claimed invention to achieve its objectives.” (Dkt. #43, at p. 23) (citations omitted).

At the December 16, 2021 hearing, Defendants reiterated their argument that “query reconstruction server” is a nonce phrase that is purely functional and lacks any known structure. Plaintiff argued that the claims recite inputs and outputs as well as objectives and operations of the query reconstruction server. Plaintiff concluded that this “server” would be recognized by persons of ordinary skill in the art as referring to a known class of structures.

**b. Analysis**

Title 35 U.S.C. § 112(f) (formerly § 112, ¶ 6) provides: “An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents

thereof.” “In exchange for using this form of claiming, the patent specification must disclose with sufficient particularity the corresponding structure for performing the claimed function and clearly link that structure to the function.” *Triton Tech of Tex., LLC v. Nintendo of Am., Inc.*, 753 F.3d 1375, 1378 (Fed. Cir. 2014).

“[T]he failure to use the word ‘means’ . . . creates a rebuttable presumption . . . that § 112, para. 6 does not apply.” *Williamson v. Citrix Online LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (citations and internal quotation marks omitted). “When a claim term lacks the word ‘means,’ the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Id.* at 1349 (citations and internal quotation marks omitted).

*Williamson*, in an *en banc* portion of the decision, abrogated prior statements that the absence of the word “means” gives rise to a “strong” presumption against means-plus-function treatment. *Id.* (citation omitted). *Williamson* also abrogated prior statements that this presumption “is not readily overcome” and that this presumption cannot be overcome “without a showing that the limitation essentially is devoid of anything that can be construed as structure.” *Id.* (citations omitted). Instead, *Williamson* found, “[h]enceforth, we will apply the presumption as we have done prior to *Lighting World* . . . .” *Id.* (citing *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004)). In a subsequent part of the decision not considered *en banc*, *Williamson* affirmed the district court’s finding that the term “distributed learning control module” was a means-plus-function term that was indefinite because of lack of corresponding structure, and in doing so *Williamson* stated that “‘module’ is a well-known nonce word.” 792 F.3d at 1350.

Here, this “server” term does not use any of the words identified by *Williamson* as a “nonce” word lacking structure. *See id.* Although the term “server” may refer to a broad class of structures, this breadth does not necessarily render the term non-structural. *See Skky, Inc. v. MindGeek, s.a.r.l.*, 859 F.3d 1014, 1019 (Fed. Cir. 2017) (finding “wireless device means” not a means-plus-function term, noting that “it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function”) (quoting *TecSec, Inc. v. Int’l Bus. Machs. Corp.*, 731 F.3d 1336, 1347 (Fed. Cir. 2013)). Also, the Federal Circuit even more recently found that a “processing” term connoted structure:

As used in the claims of the ’591 patent, the term “digital processing unit” clearly serves as a stand-in for a “general purpose computer” or a “central processing unit,” each of which would be understood as a reference to structure in this case, not simply any device that can perform a particular function.

*Samsung Elecs. Am., Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342, 1354 (Fed. Cir. 2020).

The Court’s analysis in *SyncPoint* is also analogous. *See SyncPoint Imaging, LLC v. Nintendo of Am. Inc.*, No. 2:15-CV-247, 2016 WL 55118, at \*18–\*21 (E.D. Tex. Jan. 5, 2016) (Payne, J.). Defendants’ reliance on *CXT* is unpersuasive, particularly in light of the finding in *CXT* that there was “no claim recitation of the objective or operation of the server-side application, and it is not clear what are the application’s inputs and outputs.” *See CXT Sys., Inc. v. Academy, Ltd.*, No. 2:18-CV-00171, 2019 WL 4253841, at \*15–\*16 (E.D. Tex. Sept. 6, 2019) (Payne, J.); *see id.*, at \*14–\*16.

The Court therefore hereby expressly rejects Defendants’ argument that this is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6. Defendants present no alternative proposed construction, and the Court hereby construes “**query reconstruction server . . .**

operative to receive a partial query submitted at a remote user client system . . . and . . . determine a full query . . .” to have its plain meaning.

18. “. . . not fully representative of an entire search query desired by the user” and “. . . better representative of the entire search query desired by the user”

“. . . not fully representative of an entire search query desired by the user” (’317 Patent, Claims 1, 8)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	Indefinite
“. . . better representative of the entire search query desired by the user” (’317 Patent, Claims 1, 8)	
Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	Indefinite

(Dkt. #36, at p. 40; Dkt. #42, at p. 49; Dkt. #43, at p. 26; Dkt. #44, Ex. A, at p. 13).

#### a. The Parties’ Positions

Plaintiff argues that this term is not indefinite. (Dkt. #36, at p. 40). Plaintiff submits that “the patents at issue are presumed valid under 35 U.S.C. § 282, and Defendants bear the burden of overcoming the presumption by clear and convincing evidence.” (*Id.*, at p. 50) (citation omitted).

Defendants respond that “[t]he asserted claims of the ’317 patent are indefinite as ambiguous because they recite limitations pertaining to the indeterminable, subjective intent of a person.” (Dkt. #42, at p. 49). More specifically, Defendants argue that “to perform the recited limitations in the wherein clause, the computer somehow must read the user’s person’s [*sic*] mind – twice.” (*Id.*, at p. 50).

Plaintiff replies that “[t]he claims themselves define exactly when a ‘partial query’ is ‘not fully representative of an entire search query desired by the user’ and when a ‘full query’ is ‘better representative of the entire search query desired by the user.’” (Dkt. #43, at p. 26). Plaintiff also urges that “the ’317 patent dedicates the majority of the specification to delineating how a partial query submitted by a user can be reconstructed to ultimately yield a ‘full query [that] is better representative of the entire search query desired by the user.’” (*Id.*, at p. 27).

At the December 16, 2021 hearing, Defendants urged that the only one who knows the desire of the user is the user. Plaintiff argued that, by definition, a full query is better representative than a partial query.

#### **b. Analysis**

Claim 1 of the ’317 Patent, for example, recites (emphasis added):

1. A computer database system for providing search results to a user in response to user submissions over a data network, the computer database system comprising:

a database configured to store information about events in the computer database system; and

a query reconstruction server in data communication with the database and operative to receive a partial query submitted at a remote user client system by a user seeking search results matching the submitted partial query and, in response to the received partial query, determine a full query based on

(i) the received partial query, and

(ii) information stored in the database about queries previously-submitted by users,

wherein the submitted partial query comprises an abbreviated or incomplete search query which is *not fully representative* of an entire search query desired by the user and the full query is *better representative* of the entire search query desired by the user.

The field of the claimed invention relates to search engines, which is an entire field of technology that attempts to divine the “desire” of a user so as to provide the most relevant search results for a particular search (or, in more sophisticated cases, for a particular search by a particular user at a particular time in a particular place). In this context, the terms “*fully*

representative” and “*better* representative” are readily understandable even with reference to the “entire search query *desired* by the user.” *See also* ’317 Patent at 3:9–40.

Also, the claims do not use these terms in isolation but rather in relation to each other and with regard to a “partial query,” such as in the recital in above-reproduced Claim 1 of the ’317 Patent of “wherein the submitted *partial query* comprises an abbreviated or incomplete search query which is *not fully representative* of an entire search query desired by the user and the *full query is better representative of the entire search query* desired by the user.”

Thus, Defendants do not meet their burden to show that the claims fail to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129; *see Sonix*, 844 F.3d at 1377. The *Cypress Lake* and *Avenue Innovations* cases cited by Defendants do not compel otherwise. *See Cypress Lake Software Inc. v. Samsung Elecs. Am., Inc.*, 382 F. Supp. 3d 586, 610 (E.D. Tex. 2019) (discussing lack of “objective basis” for understanding “more convenient”); *see also Ave. Innovations, Inc. v. E. Mishan & Sons Inc.*, 310 F. Supp. 3d 457, 463–64 (S.D.N.Y. 2018) (discussing lack of “objective boundaries” for “operative position” phrase).

Defendants present no alternative proposed construction, and the Court therefore hereby construes “. . . **not fully representative of an entire search query desired by the user**” and “. . . **better representative of the entire search query desired by the user**” to have their **plain meaning**.

*Disputed Claim Terms in United States Patent No. 9,928,279***19. “streaming appliance computing device”**

<b>“streaming appliance computing device”</b> (’279 Patent, Claims 1–3, 7)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“a device capable of streaming a media file”	“an electronic device with the single or limited purpose of streaming media objects”

(Dkt. #36, at p. 41; Dkt. #42, at p. 54; Dkt. #43, at p. 28; Dkt. #44, Ex. A, at p. 15).

**a. The Parties’ Positions**

Plaintiff argues that “Plaintiff’s proposed construction is supported throughout the specification,” and “[t]he patent’s classification of a ‘personal computer’ as a ‘streaming appliance’ dooms Defendants’ argument that a ‘streaming appliance computing device’ must have ‘the single or limited purpose of streaming media objects.’” (Dkt. #36, at p. 41).

Defendants respond that “[t]he ’279 patent repeatedly distinguishes between a ‘personal computer media device’ and a ‘streaming media appliance.’” (Dkt. #42, at p. 55).

Plaintiff replies that “the specification of the ’279 patent explicitly discloses that a ‘personal computer’ can be a ‘streaming appliance.’” (Dkt. #43, at p. 28).

**b. Analysis**

Claim 1 of the ’279 Patent, for example, recites (emphasis added):

1. A method, comprising:

establishing a streaming media connection between a media server computing device and a *streaming appliance computing device* for streaming a first media object to the *streaming appliance computing device* for consumption by a user;

obtaining a single-action user input at the media server computing device from the *streaming appliance computing device* while the first media object is streaming, the single action user input to indicate a desired relationship measure

comprising a selected level of similarity between one or more attributes of the first media object and one or more attributes of individual media objects of a plurality of media objects, the single-action user input further indicating to select a second media object of the plurality of media objects for subsequent play;

identifying the second media object for subsequent play in accordance with the desired relationship measure while the first media object is streaming at least in part in response to obtaining the single action user input, the first and second media objects having a relationship measure that satisfies the desired relationship measure; and

initiating streaming of the second media object from the media server to the *streaming appliance computing device*.

Defendants cite disclosures in the specification regarding four different types of media devices.

First, in the “Portable Media Device Exemplary Embodiment,” “[s]uch portable media player devices include but are not limited to MP3 players such as those known by the trade names APPLE IPOD, CREATIVE LABS ZEN MICRO, DELL DJ, IRIVER H10, RIO CARBON, or cell phones incorporating such functionality, or similar devices capable of storing and / or reproducing media files.” ’279 Patent at 6:16–28.

Second, in the “Personal Computer Based Media Device Exemplary Embodiment,” “[e]xamples of personal computer based music management systems include but are not limited to, systems marketed under the trade names YAHOO! MUSIC ENGINE, MUSIC-MATCH JUKEBOX, WINDOWS MEDIA PLAYER, APPLE ITUNES, AND REAL JUKEBOX.” *Id.* at 9:1–13.

Third, in the “Media Appliance Exemplary Embodiment,” “[s]uch media appliances or component audio devices include, but are not limited to networked component audio devices (digital multimedia receivers) marketed under trade names such as NETGEAR MP101 and LINKSYS WMSL11.” *Id.* at 10:50–64.

Fourth, in the “*Streaming Media Appliance* Embodiment,” the specification discloses:

Another exemplary embodiment of a system and method for selecting a media file using a streaming media appliance is depicted in FIGS. 8 and 9. FIG. 9 depicts an exemplary method of creating relationship data and loading the relationship data onto a *personal computer or other type of streaming media appliance*. FIG. 8 depicts an architecture or configuration of a system for selecting a media file using a personal computer or other streaming appliance 805. Such streaming appliances include, but are not limited to items marketed under trade names such as the PHILIPS STREAMIUM. *PC based streaming applications* include services such as those marketed under trade names REAL RHAPSODY, YAHOO! UNLIMITED and MUSICMATCH ‘ON DEMAND’.

*Id.* at 12:14–29 (emphasis added). Because “PC” and “personal computer” can be readily understood as a reference to a type of general-purpose computer, this reference to “*PC based streaming applications*” weighs against Defendants’ proposal of requiring a “limited purpose” device. *Id.* Also, this reference to “personal computer or other type of streaming media appliance” reinforces that a personal computer can be a streaming appliance. *Id.*

On balance, despite Defendants’ submission of a technical definition of “appliance” as referring to a device with a limited purpose (Dkt. #42, Ex. 16, *Microsoft Computer Dictionary* (2002)), Defendants do not persuasively justify limiting “streaming appliance computing device” to being a special-purpose device rather than potentially being a general-purpose computer, particularly in light of the above-reproduced references to “PC based streaming applications” and “a personal computer or other type of streaming media appliance” in the specification.

The Court therefore hereby construes “**streaming appliance computing device**” to mean “**device capable of streaming a media file.**”

**20. “single-action user input”**

<b>“single-action user input”</b> (’279 Patent, Claims 1–3)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“indicia from a user constituting a single keystroke, button press, dial rotation, or icon selection on a user interface, without navigation”

(Dkt. #36, at p. 42; Dkt. #42, at p. 55; Dkt. #43, at p. 28; Dkt. #44, Ex. A, at p. 15).

**a. The Parties’ Positions**

Plaintiff argues that “[w]hen considering the disputed phrase in the context of the claim language and the ’279 patent, a POSA would not have any difficulty understanding the disputed phrase’s meaning.” (Dkt. #36, at p. 42) (citation omitted). Plaintiff also argues that “Defendants’ construction improperly seeks to limit the disputed phrase to particular embodiments.” (*Id.*, at p. 43). Further, Plaintiff argues that Defendants’ proposal of “without navigation” “is completely absent from the claims and any embodiment discussed in the specification with respect to the disputed phrase” and “creates confusion and ambiguity as to what is meant by ‘without navigation.’” (*Id.*, at p. 44).

Defendants respond that “[s]ingle-action user input’ is not a term of art and requires explanation from the ’279 patent specification to arrive at its proper meaning.” (Dkt. #42, at pp. 55–56; *see id.*, at pp. 56–58).

Plaintiff replies that “a POSA in light of the specification (including in light of specific actions cited to by Defendants) would readily understand the plain and ordinary meaning of

‘single-action user input,’ and Defendants’ construction improperly attempts to limit the disputed term to a preferred embodiment.” (Dkt. #43, at p. 29).

## **b. Analysis**

Claim 1 of the ’279 Patent, for example, recites (emphasis added):

1. A method, comprising:

establishing a streaming media connection between a media server computing device and a streaming appliance computing device for streaming a first media object to the streaming appliance computing device for consumption by a user;

obtaining a *single-action user input* at the media server computing device from the streaming appliance computing device while the first media object is streaming, the *single action user input* to indicate a desired relationship measure comprising a selected level of similarity between one or more attributes of the first media object and one or more attributes of individual media objects of a plurality of media objects, the *single-action user input* further indicating to select a second media object of the plurality of media objects for subsequent play;

identifying the second media object for subsequent play in accordance with the desired relationship measure while the first media object is streaming at least in part in response to obtaining the *single action user input*, the first and second media objects having a relationship measure that satisfies the desired relationship measure; and

initiating streaming of the second media object from the media server to the streaming appliance computing device.

As a threshold matter, the parties do not distinguish between “single-action user input” (with a hyphen) and “single action user input” (without a hyphen). The Court therefore construes these terms together.

Defendants’ proposals of “indicia” and “without navigation” lack evidentiary support. Indeed, the specification refers to navigation. *See, e.g.*, ’279 Patent at 23:24–36. Nonetheless, the specification frames the claimed invention with reference to situations in which a user might have difficulty “manipulating playlists and choosing an artist, album or track from hundreds or thousands of choices”:

[T]he introduction of cheaper, smaller, and relatively sturdy mass storage devices has led to a new generation of portable devices with storage capacity for

thousands of songs. An entire music collection can now fit in a pocket, purse, or car audio system.

However, portable media devices often have limited resources for user interfaces. Displays are generally small because the devices themselves are small. Input devices such as *button controls*, and choosing devices are *simple*. *Pointing devices and keyboards are rare or impractical*. The portable device must opt for a *simple user interface* to ensure that the device is portable, cost-effective, easy to use, and sturdy enough to survive its intended environment.

Portable media players are designed to operate in environments that not only challenge the ability of the device to operate, but that also challenge the user to operate the device. Increasingly, portable media players are being used in automobiles. Joggers and those operating exercise equipment also commonly use portables.

With *limited display and user input capabilities*, the task of manipulating playlists and choosing an artist, album, or track from hundreds or thousands of choices can become burdensome. With regard to media player appliances in an automobile, when the user is operating the automobile, the task of selecting the[] next audio recording becomes downright dangerous. The user is forced to become passive and listen only to pre-programmed or random playlists.

'279 Patent at 1:43–2:2 (emphasis added).

With this background regarding the impracticality of using “pointing devices and keyboards,” the recital of a “single-action user input” in the claims can be readily understood as involving a push of a “button” or a similar single action. *Id.* Although the specification also refers to a “wheel or dial” (*id.* at 25:43–56), the disputed term here expressly requires a “single action.” *See also id.* at 26:52–56 (“Of course, the particular key, button, icon or dial associated with the playback functions will depend on the particular device. Indeed, a device with a single user input or i[]con element could be utilized, e.g. the entire user interface could comprise a skip button or icon.”) & 27:40–50 (disclosing example with “key/buttons layout where the buttons point in a North, East, South, and West directions”).

The Court therefore hereby construes “**single-action user input**” and “**single action user input**” to mean “**user input that is based on a push of a button or a similar single action.**”

*Disputed Claim Terms in United States Patent No. 7,370,011*

**21. “a link from a portal”**

<b>“a link from a portal”</b> (’011 Patent, Claim 7)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“a link from a service that stands between the user and another service to perform an added value”	“a URL on the portal site that references a page on the institution’s site”

(Dkt. #36, at p. 44; Dkt. #42, at p. 58; Dkt. #43, at p. 29; Dkt. #44, Ex. A, at p. 16).

**a. The Parties’ Positions**

Plaintiff argues that “the patentees acted as their own lexicographer to establish the meaning of the term ‘portal’ as used in in the disputed phrase,” and “Plaintiff’s proposed construction is taken verbatim from the specification.” (Dkt. #36, at p. 44). Plaintiff also argues that “Defendants focus on a single excerpt from the ’011 patent to improperly limit ‘a link’ to mean only ‘a URL.’” (*Id.*).

Defendants respond that “Plaintiff’s proposal seeks to unnecessarily construe ‘portal’ while ignoring the ’011 Patent’s express disclosures regarding what constitutes ‘a link from a portal.’” (Dkt. #42, at p. 58) (citation omitted). Defendants argue that “[u]nlike Defendants’ proposed construction, which is grounded in the specification (*see, e.g.*, ’011 Patent at 5:47–50), Plaintiff’s proposed constructions—which inject the ambiguous concept of ‘perform[ing] an added value’ (Br. at 44–45)—are unnecessary and unhelpful to the jury.” (*Id.*, at p. 60).

Plaintiff replies that “Defendants’ construction . . . inappropriately ignores the specification’s definition of ‘portal.’” (Dkt. #43, at p. 29). Plaintiff also argues that the disclosures cited by Defendants do not constitute a definition of “link.” (*Id.*, at p. 30).

## **b. Analysis**

The specification discloses:

*As used herein*, “portal” refers to a service that stands between the user and another service to perform an added value, such as aggregation, presentation, reformatting or transport of data. Typically, a user will have user-specific portal authentication data (PAD) that authenticates the user to the portal. For example, a portal might authenticate the user if the user presents a portal server with a valid portal user ID and a password that goes with that portal user ID. Authentication might be more restrictive in some systems, such as a system wherein the authentication data includes a node address, such as an IP address, thereby limiting access to only those users that can produce a valid portal user ID and the correct password and do it from a particular IP address.

’011 Patent at 4:29–32 (emphasis added).

The patentee thus expressly defined the term “portal” in the specification, and “the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citation omitted).

Defendants do not persuasively demonstrate that the term “link” requires construction or that a “link” is necessarily a URL. Although a link may be a URL, this is a specific feature of particular embodiments that should not be imported into the claims. *See* ’011 Patent at 5:47–50 (“A link on the page at the portal web server is a URL referencing a page on the financial institution’s site and includes the user’s portal ID in the URL.”); *see also Phillips*, 415 F.3d at 1323.

The Court therefore hereby construes **“a link from a portal”** to mean **“a link from a service that stands between the user and another service to perform an added value, such as aggregation, presentation, reformatting, or transport of data.”**

**22. “each link from the portal”**

<b>“each link from the portal”</b> (’011 Patent, Claim 9)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“each link from the service that stands between the user and another service to perform an added value”	“a URL on the portal site that references a page on the institution’s site”

(Dkt. #36, at p. 45; Dkt. #43, at p. 29; Dkt. #44, Ex. A, at p. 17).

**a. The Parties’ Positions**

Plaintiff argues that “Plaintiff’s proposed construction is consistent with its proposed construction of ‘a link from a portal,’ discussed above.” (Dkt. #36, at p. 45).

Defendants respond as to this term together with the term “a link from a portal,” which is addressed above. (Dkt. #42, at p. 58). Plaintiff replies likewise. (*See* Dkt. #43, at pp. 29–30).

**b. Analysis**

Plaintiff proposes again construing the word “portal,” but this word is construed in the first instance as to the term “a link from *a* portal” (above) and need not be construed again when referring to “*the* portal.”

Because of this, and based on the analysis of the similar term “a link from a portal” (discussed above), the Court hereby expressly rejects the proposed constructions, and no further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see also Finjan*, 626 F.3d at 1207 (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *Bayer*, 989 F.3d at 977–79.

The Court accordingly hereby construes “each link from the portal” to have its **plain meaning**.

**23. “a user identification”**

<b>“a user identification”</b> (’011 Patent, Claim 7)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“user-specific portal authentication data that authenticates the user to the portal”

(Dkt. #36, at p. 46; Dkt. #42, at p. 61; Dkt. #43, at p. 30; Dkt. #44, Ex. A, at p. 17).

**a. The Parties’ Positions**

Plaintiff argues that “Defendants’ construction is inconsistent with the claim language and improperly narrows the term to a preferred embodiment.” (Dkt. #36, at p. 46; *see id.*, at p. 47).

Defendants respond that “[t]he ’011 Patent’s specification expressly delineates the types of identifying data that do and do not constitute ‘a user identification’ within the context of the patent.” (Dkt. #42, at p. 61) (citation omitted). Defendants argue that the doctrine of claim differentiation does not apply and, alternatively, Defendants argue that the doctrine of claim differentiation cannot broaden the claim beyond the proper scope that is apparent from the specification. (*See id.*, at pp. 62 & 65). Defendants also cite prosecution history. (*See id.*, at pp. 63–64).

Plaintiff replies: “A ‘user identification’ is not the equivalent of ‘authentication data that authenticates the user;’ Plaintiff is arguing simply that the ‘user identification’ must identify the user.” (Dkt. #43, at p. 30). Plaintiff argues, for example, that “[i]f the applicants had intended a

“user identification” to mean “portal authentication data,” they could have said so, as they did with “user-institution authentication data [in Claim 7].” (*Id.*, at p. 31). Further, Plaintiff argues that “[i]f the user identification were ‘authentication data that authenticates the user to the portal,’ there would be no need to ‘associat[e] the user identification with the portal’ [in Claim 7]—the portal would already associate the user identification with the portal via authentication.” (*Id.*) Finally, Plaintiff urges:

Dependent claim 8 requires a relationship between the “user identification” and the “portal” by requiring that “the user identification includes a user portal ID.” Independent claim 7 simply requires a “user identification” without any reference to a portal. Thus, to ensure that the claims have different scope, “user identification” in claim 7 should not be construed in a way that requires that it relate to a portal. The correct way to do so is to simply hold that “user identification” has its plain and ordinary meaning.

(*Id.*, at p. 32).

### **b. Analysis**

Claim 7 of the ’011 Patent recites (emphasis added):

7. A computer readable medium storing instructions for execution in a computer, the medium when executed by a computer performing the method comprising:  
     accepting a connection at an institution server, the connection initiated by a user following a link from a portal, the link including a *user identification*;  
     responsive to the connection, enabling the user to authenticate with the institution server using user-institution authentication data;  
     responding to the authentication by associating the *user identification* with the portal; and  
     servicing a request by the portal, after authenticating the portal using portal authentication data, by providing, to the portal, data of the user at the institution, wherein the user-institution authentication data and the portal authentication data are not the same data.

The specification discloses:

*Typically*, a user will have user-specific portal authentication data (PAD) that authenticates the user to the portal. For example, a portal might authenticate the user if the user presents a portal server with a valid portal user ID and a password that goes with that portal user ID. Authentication might be more restrictive in some systems, such as a system wherein the authentication data includes a node

address, such as an IP address, thereby limiting access to only those users that can produce a valid portal user ID and the correct password and do it from a particular IP address.

To distinguish from various authentication data, PAD refers to authentication data needed by the user to access the portal's services, while "FAD" refers to authentication data needed by the user to access the financial institutions services and "PFAD" refers to authentication data needed by the portal to access the financial institution's services on behalf of one or more portal users. Note that in the systems shown in FIGS. 1-2, there is no PFAD, since the portal in those systems does not have a relationship with the financial institution to allow the portal to connect to the financial institution servers as the portal.

'011 Patent at 4:32–53 (emphasis added).

Defendants' proposal of "user-specific portal authentication data that authenticates the user to the portal" is thus based on disclosure in the specification that is accompanied by the word "[t]ypically" (*id.* at 4:32), which is permissive rather than mandatory. Also, to whatever extent Defendants maintain that its proposed construction is compelled by surrounding claim language regarding a "portal," other claim language may indeed have an effect on how the claim limitations may be met, but Defendants do not show how any other claim language compels a narrow interpretation of the term "user identification."

The Court therefore hereby expressly rejects Defendants' proposed construction, and no further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 ("[D]istrict courts are not (and should not be) required to construe every limitation present in a patent's asserted claims."); *see also Finjan*, 626 F.3d at 1207 ("Unlike *O2 Micro*, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); *Bayer*, 989 F.3d at 977–79.

The Court accordingly hereby construes **"a user identification"** to have its **plain meaning**.

**24. “respective user identifications”**

<b>“respective user identifications”</b> (’011 Patent, Claim 9)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
Plain and ordinary meaning	“user-specific portal authentication data that authenticates the user to the portal”

(Dkt. #36, at p. 47; Dkt. #42, at p. 61; Dkt. #43, at p. 30; Dkt. #44, Ex. A, at p. 18).

**a. The Parties’ Positions**

Plaintiff argues: “Defendants’ proposed construction is the same as its construction of ‘user identification.’ It thus ignores the word ‘respective’ and is also incorrect for the reasons stated above.” (Dkt. #36, at p. 48).

Defendants respond as to this term together with the term “a user identification,” which is addressed above. (*See* Dkt. #42, at pp. 61–65). Plaintiff replies likewise. (*See* Dkt. #43, at pp. 30–31).

**b. Analysis**

For the reasons discussed above regarding the similar term “a user identification,” the Court hereby expressly rejects Defendants’ proposed construction, and no further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see also Finjan*, 626 F.3d at 1207 (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *Bayer*, 989 F.3d at 977–79.

The Court accordingly hereby construes **“respective user identifications”** to have its **plain meaning**.

## 25. “user-institution authentication data”

The parties submit that this term appears in Claims 7 and 9 of the ’011 Patent. Plaintiff submits: “The relevant parties have reached agreement that ‘user-institution authentication data’ means ‘authentication data by the user to access the financial institution’s services’ and ask that the Court adopt this construction, accordingly.” (Dkt. #36, at p. 48). The parties confirm this agreement in their Joint Claim Construction Chart Pursuant to P.R. 4-5(d). (Dkt. #44, Ex. A, at p. 18).

Based on this agreement reached by the parties, the Court hereby construes **“user-institution authentication data”** to mean **“authentication data by the user to access the financial institution’s services.”**

## 26. “associating the user identification with the portal”

<b>“associating the user identification with the portal”</b> (’011 Patent, Claim 7)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“associating the user identification with the service that stands between the user and another service to perform an added value”	“storing or recording the user-specific portal authentication data included in the link”

(Dkt. #36, at p. 48; Dkt. #42, at p. 66; Dkt. #43, at p. 32; Dkt. #44, Ex. A, at p. 19).

### a. The Parties’ Positions

Plaintiff argues that whereas “‘portal’ is a defined term in the ’011 patent and should be accorded the given meaning” and “a POSA would readily understand the word ‘associating,’ which is a common word that has no special definition in the ’011 patent,” “Defendants’ proposed construction seeks to improperly limit the scope of the claim language.” (Dkt. #36, at p. 48; *see id.*, at pp. 48–49).

Defendants respond that “in the context of the ’011 Patent, the term ‘associating’ requires a degree of permanence to link a user’s portal account and financial account to facilitate ‘servicing a request by the portal,’” and “the ’011 Patent does not disclose any techniques for ‘associating the user identification with the portal’ that do not involve permanence through remembering, storing, recording, or saving.” (Dkt. #42, at pp. 66 & 68).

Plaintiff replies that the specification uses the words “storing” and “recording” in conjunction with “associating” and thereby demonstrates that “storing” and “recording” are different from “associating.” (See Dkt. #43, at pp. 32–33).

### **b. Analysis**

Claim 7 of the ’011 Patent recites (emphasis added)

7. A computer readable medium storing instructions for execution in a computer, the medium when executed by a computer performing the method comprising:  
     accepting a connection at an institution server, the connection initiated by a user following a link from a portal, the link including a user identification;  
     responsive to the connection, enabling the user to authenticate with the institution server using user-institution authentication data;  
     responding to the authentication by *associating the user identification with the portal*; and  
     servicing a request by the portal, after authenticating the portal using portal authentication data, by providing, to the portal, data of the user at the institution, wherein the user-institution authentication data and the portal authentication data are not the same data.

The specification discloses that a portal server can request information from a financial institution for a particular user:

In one embodiment of the present invention, the shortcomings of the prior art are overcome. In one such portal information system, a financial institution or other information maintainer, has a list of its account holders that also have accounts with a portal and have agreed to link their portal account and user account with the financial institution or other information maintainer. When a user logs onto the user’s portal account, the portal server can request information from the user account over a trusted link to the financial institution or other information maintainer. The portal can request data for a particular user over the trusted link

or can request bulk data for all users, using portal authentication data, as opposed to user authentication data.

'011 Patent at 3:19–31.

One process for setting up the necessary accounts will now be described, with reference to FIG. 3. This process assumes that a user has already set up a portal account and an account with a financial institution.

To begin, the user logs onto the portal server and requests that the accounts be linked, usually by selecting a page from the portal web server. The portal server might perform additional authentication at this point. A link on the page at the portal web server is a URL referencing a page on the financial institution's site and includes the user's portal ID in the URL. The financial institution then performs its conventional user authentication and *remembers the user's portal ID*, storing it in a list of all other signed up users. The financial institution then redirects the user back to the portal site, after *recording the user's portal ID and associating it with the user* if the user succeeds in authenticating himself or herself with the financial institution server. Thereafter, the portal server can make a trusted server-to-server connection to the financial institution server to get information for one or more signed up users, either on an individual request basis or by nightly batch request for all signed up users. The latter would allow for quicker response times, since the user displays can be pregenerated for the user.

*Id.* at 5:40–62 (emphasis added); *see id.* at 7:35–42 (“Financial institution will *save* the unique the [*sic*] portal ID with the customer profile at financial institution.”) (emphasis added).

This distinct usage of “recording” and “associating” in the same sentence weighs against Defendants’ proposal that “associating” means “storing or recording.” *Id.* at 5:54–55.

As to Plaintiff’s proposed construction, Plaintiff proposes again construing the word “portal,” but this word is construed in the first instance as to the term “a link from *a* portal” (above) and need not be construed again when referring to “*the* portal.”

The Court therefore hereby expressly rejects the parties’ proposed constructions, and no further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see*

also *Finjan*, 626 F.3d at 1207 (“Unlike *O2 Micro*, where the court failed to resolve the parties’ quarrel, the district court rejected Defendants’ construction.”); *Bayer*, 989 F.3d at 977–79.

The Court accordingly hereby construes “**associating the user identification with the portal**” to have its **plain meaning**.

**27. “associating respective user identifications with the portal”**

<b>“associating respective user identifications with the portal”</b> (’011 Patent, Claim 9)	
<b>Plaintiff’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
“associating respective user identifications with the service that stands between the user and another service to perform an added value”	“storing or recording the user-specific portal authentication data included in the link”

(Dkt. #36, at p. 49; Dkt. #42, at p. 66; Dkt. #43, at p. 32; Dkt. #44, Ex. A, at p. 19).

**a. The Parties’ Positions**

Plaintiff argues that “Plaintiff’s proposed construction is consistent with its other constructions, discussed above.” (Dkt. #36, at p. 49).

Defendants respond as to this term together with the term “associating the user identification with the portal,” which is addressed above. Plaintiff replies likewise. (*See* Dkt. #43, at pp. 32–33).

**b. Analysis**

For the reasons discussed above regarding the similar term “associating the user identification with the portal,” the Court hereby expressly rejects the parties’ proposed constructions, and no further construction is necessary. *See O2 Micro*, 521 F.3d at 1362 (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”); *see also Finjan*, 626 F.3d at 1207 (“Unlike *O2 Micro*, where the

court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); *Bayer*, 989 F.3d at 977–79.

The Court therefore hereby construes “**associating respective user identifications with the portal**” to have its **plain meaning**.

### **CONCLUSION**

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

**IT IS SO ORDERED.**

**SIGNED this 4th day of January, 2022.**

  
AMOS L. MAZZANT  
UNITED STATES DISTRICT JUDGE